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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 20.3193 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-2
Perfect score: 489
Sequence: 1 MARLOTALLVLLVALQ.....EICADPRVFWKMLNLSQ 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_101002.*
1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
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22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	489	100.0	93	AAW20058	Macrophage derived
2	489	100.0	93	AAW62783	Amino acid sequenc
3	489	100.0	93	AAW59433	Human chemokine pr
4	489	100.0	93	AAW40811	Macrophage-derived
5	489	100.0	93	AAW26175	Macrophage-derived
6	489	100.0	93	AAW24414	Human macrophage d
7	489	100.0	93	AAW05871	Human macrophage d
8	489	100.0	93	AAW05829	Macrophage derived
9	489	100.0	93	AAW07500	A human monokine d
10	489	100.0	93	AAO14046	Human macrophage-d

11	484	99.0	93	18	AAW07604	Cytokine beta-13 s
12	484	99.0	93	19	AAW57881	Human chemokine be
13	484	99.0	93	22	AAW68352	Amino acid sequenc
14	480	98.2	93	20	AAW05879	Human macrophage-d
15	463	94.7	93	20	AAW05880	Macaque macrophage
16	457	93.5	86	19	AAW59432	Human chemokine pr
17	445	91.0	93	18	AAW20059	Human macrophage d
18	445	91.0	93	20	AAW24417	Macrophage derived
19	445	91.0	93	20	AAW05872	Human macrophage-d
20	386	78.9	69	23	AAO20022	Human chemokine MD
21	386	78.9	69	23	AAO14155	Human MDC protein.
22	386	78.9	70	18	AAW20060	Human macrophage d
23	386	78.9	70	20	AAW24413	Macrophage derived
24	386	78.9	70	20	AAW05873	Human macrophage-d
25	386	78.9	154	20	AAW05878	yeast pre-pro-alpha
26	386	78.9	172	20	AAW29895	Human MDC and huma
27	386	78.9	334	20	AAW29904	Human MDC and HIV-
28	386	78.9	587	20	AAW29900	Human MDC and HIV-
29	380	77.7	68	18	AAW17668	Stem cell mobilisi
30	374	76.5	69	18	AAW20061	Human macrophage d
31	374	76.5	69	20	AAW24415	Macrophage derived
32	374	76.5	69	20	AAW05874	Human macrophage-d
33	362	74.0	69	18	AAW20062	Human macrophage d
34	362	74.0	69	20	AAW24416	Macrophage derived
35	362	74.0	69	20	AAW05875	Human macrophage-d
36	336	68.7	473	22	ABW61797	Chimeric chemokine
37	334	68.3	92	19	AAW59434	Mouse chemokine pr
38	332	67.9	92	20	AAW05876	Mouse macrophage-d
39	309	63.2	81	20	AAW05877	Rat macrophage-der
40	268	54.8	68	22	AAW61808	Murine MDC mature
41	268	54.8	68	23	AAW78392	Mouse chemokine mm
42	268	54.8	68	23	AAW68355	Murine chemokine m
43	214.5	43.9	67	23	AAW78396	Human/mouse hybrid
44	214.5	43.9	67	23	AAW68359	Chimeric chemokine
45	213	43.6	37	22	ABB39053	Peptide #6559 enco

ALIGNMENTS

RESULT 1

AAW20058

ID AAW20058 standard; Protein; 93 AA.

XX AC

XX AAW20058;

XX DT 11-SEP-1997 (first entry)

XX DE Macrophage derived chemokine for treating inflammation.

XX DE MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;

XX KW Rheumatoid arthritis; chemotaxis; fibroblast proliferation;

XX KW wound healing; angiogenesis; inflammation.

XX OS Homo sapiens.

XX FH Key

XX FT Peptide

XX FT Protein

XX FT /label= sig_peptide

XX FT /label= mat_protein

XX PN WO9640923-A1.

XX PD 19-DEC-1996.

XX PF 07-JUN-1996; 96WO-US10114.

XX PR 16-NOV-1995; 95US-0558658.

XX PR 07-JUN-1995; 95US-0479620.

XX PA (ICOS-) ICOS CORP.

XX XX

PI Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAV76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 489; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
 DB 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 RESULT 2
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 AC AAW62783;
 XX
 XX 24-SEP-1998 (first entry)
 DT Amino acid sequence of human STCP-1.
 DE
 XX Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX Homo sapiens.
 OS
 XX WO9824907-A1.
 PN 11-JUN-1998.
 XX
 XX 26-NOV-1997; 97WO-US21552.
 PF 03-DEC-1996; 96US-0760127.
 PR (AMGE-) AMGEN INC.
 PA Andrew DP, Chang M;
 PI WPI; 1998-333326/29.
 XX N-PSDB; AAV38933.
 DR
 XX Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells

XX Claim 1; Fig 2A-F; 96pp; English.
 PS
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 489; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
 DB 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 RESULT 3
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 AC AAW59433;
 XX
 XX 27-AUG-1998 (first entry)
 DT Human chemokine protein 331D5.
 DE
 XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= 331D5
 FT /note= "chemokine protein"
 XX WO9811226-A2.
 PN 19-MAR-1998.
 XX
 XX 09-SEP-1997; 97WO-US15315.
 PF 10-SEP-1996; 96US-0025724.
 PR (SCHE) SCHERING CORP.
 PA Gorman DM, Hedrick JA, Zlotnik A;
 PI WPI; 1998-207387/18.
 XX N-PSDB; AAV34997.
 DR
 XX Mammalian CC and CXCL chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX Claim 1; Page 78; 82pp; English.

XX This sequence represents a novel human chemokine protein, 331D5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,

CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment

CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,

CC regeneration, degeneration or atrophy may be treated by the inventive

CC compositions.

XX Sequence 93 AA;

SQ Query Match 100.0%; Score 489; DB 19; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60

DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKEICADPRVPMVKMLKLSQ 93

DB 61 PRPGVLLTFRDKKEICADPRVPMVKMLKLSQ 93

RESULT 4

AAW40811

ID AAW40811 standard; Protein; 93 AA.

XX AAW40811;

AC AAW40811;

DT 01-APR-1998 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;

KW arthritis; inflammatory disorder; cancer; Crohn's disease;

KW atherosclerosis.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "leader peptide"

FT Protein 25..93

FT /note= "mature protein"

PN US568927-A.

PD 18-NOV-1997.

XX 07-JUN-1995; 95US-0480449.

XX 07-JUN-1995; 95US-0480449.

XX (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI; 1998-008038/01.

DR N-PSDB; AAT9233.

XX Antibodies specific for macrophage-derived chemokine - useful for

PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This

CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its

CC receptors. The DNA encoding this sequence can be used for identifying and

CC isolating non-human MDC homologues. The MDC protein is potentially useful

CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can

CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX Sequence 93 AA;

SQ Query Match 100.0%; Score 489; DB 19; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60

DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKEICADPRVPMVKMLKLSQ 93

DB 61 PRPGVLLTFRDKKEICADPRVPMVKMLKLSQ 93

RESULT 5

AAV26175

ID AAY26175 standard; Protein; 93 AA.

XX AAY26175;

AC AAY26175;

DT 29-SEP-1999 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;

KW humoral response; cell-mediated response; PCR; immunostimulatory;

KW expression plasmid vector.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "signal peptide"

FT Protein 25..93

FT /note= "mature macrophage-derived chemokine"

PN WO9929728-A1.

PD 17-JUN-1999.

XX 11-DEC-1998; 98WO-US26291.

XX 11-DEC-1997; 97US-0069281.

XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.

XX Devico AL, Gallo RC, Garzino-Demo A;

XX WPI; 1999-385578/32.

DR N-PSDB; AAX80630.

XX Methods of enhancing vaccine efficacy

XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.

XX The present sequence is macrophage-derived chemokine. This belongs to

CC the CC class of chemokines. The efficacy of a vaccine is enhanced by

CC combining it with one or more chemokines to enhance the immune response

CC to an antigen. This can be humoral or cell-mediated immune response. The

CC purified chemokines, fragments, derivatives or analogues are

CC administered either concurrently with one or more purified antigens

CC against which an immune response is desired or within a time period

CC either before or after antigen administration. The chemokine gene is

CC isolated by PCR, and administered by constructing an expression plasmid

CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

SQ Sequence 93 AA;

Query Match 100.0%; Score 489; DB 20; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

RESULT 6

AAY24414

ID AAY24414 standard; Protein; 93 AA.

XX

AC AAY24414;

XX

DT 24-SEP-1999 (first entry)

DE Human macrophage derived chemokine.

XX

KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide 1..24

FT /label= signal

FT Protein 25..93

FT /label= MDC

XX

PN US5932703-A.

XX

PD 03-AUG-1999.

XX

PF 07-JUN-1996; 96US-0660542.

XX

PR 07-JUN-1996; 96US-0660542.

XX

PR 07-JUN-1995; 95US-0479620.

XX

PR 16-NOV-1995; 95US-0558658.

XX

PA (ICOS-) ICOS CORP.

XX

PI Godiska R, Gray PW;

XX

DR WPI; 1999-443621/37.

XX

DR N-PSDB; AAX90162.

XX

PT Macrophage derived chemokine analogues useful for inhibiting.

XX

PT Macrophage derived chemokine-induced chemotaxis

XX

PS Claim 2; Column 41-43; 43pp; English.

XX

CC The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, Crohn's disease and pulmonary fibrosis. The present sequence represents human MDC.

XX

SQ Sequence 93 AA;

Query Match

Best Local Similarity 100.0%; Score 489; DB 20; Length 93;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

RESULT 7

AAY05871

ID AAY05871 standard; Protein; 93 AA.

XX

AC AAY05871;

XX

DT 02-AUG-1999 (first entry)

XX

DE Human macrophage-derived C-C chemokine MDC.

XX

KW MDC; macrophage derived chemokine; C-C chemokine; human; antagonist; chemotactant; antiproliferative; dermatological;

KW immunosuppressive; antiinflammatory; antitumor; antitumor;

KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;

KW vaccine.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide 1..24

FT /note= "signal peptide"

FT Protein 25..93

FT /note= "mature protein"

XX

PN WO9915666-A2.

XX

PD 01-APR-1999.

XX

PF 28-SEP-1998; 98WO-US20270.

XX

PR 28-APR-1998; 98US-0067447.

XX

PR 26-SEP-1997; 97US-0939107.

XX

PA (ICOS-) ICOS CORP.

XX

PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX

DR WPI; 1999-254715/21.

XX

DR N-PSDB; AAX58316.

XX

PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists

XX

PS Example 1; Page 124; 147pp; English.

XX

CC The present sequence represents a novel human C-C chemokine, designated macrophage derived chemokine (MDC) that binds to the CCR4 chemokine receptor. The invention provides vertebrate MDC polypeptides (see also AAY05876, AAY05877 and AAY05880) and isolated polynucleotides encoding them, vectors and host cells, and methods for the recombinant or synthetic production of MDC. Also provided are MDC analogues, antibodies and antagonists. The MDC antagonists are used for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for treating asthma (all claimed). MDC polypeptides are also used in claimed vaccine compositions.

XX

SQ Sequence 93 AA;

Query Match 100.0%; Score 489; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||
 DB 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 8
 AAY06829
 ID AAY06829 standard; Protein; 93 AA.
 XX
 AC AAY06829;
 XX
 DT 25-JUN-1999 (first entry)
 XX
 DE Macrophage derived chemokine (MDC) encoding DNA.
 XX
 KW Macrophage derived chemokine; MDC; lentivirus infection; human; HIV;
 KW human immunodeficiency virus; feline immunodeficiency virus;
 KW bovine immunodeficiency virus.
 XX
 OS Homo sapiens.
 XX

FH Key Location/Qualifiers
 FT Peptide 27..45
 FT /note= "N-terminal fragment specifically claimed
 FT for in claim 18"
 FT
 FT Peptide 26..45
 FT /note= "N-terminal fragment specifically claimed
 FT for in claim 19"
 FT
 FT
 FN W09914237-A1.
 XX
 XX 25-NAR-1999.
 XX
 PF 16-SEP-1998; 98WO-US19450.
 XX
 PR 16-SEP-1997; 97US-0931764.
 XX
 XX (ALKU) AKZO NOBEL NV.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A, Markham PD;
 PI Pal R;
 XX
 XX WPI; 1999-244024/20.
 DR N-PSDB; AAX32817.
 XX
 PT Treatment or prevention of lentivirus, particularly HIV infection
 XX
 PS Claim 16; Page 97-98; 103pp; English.
 XX
 XX This represents a human macrophage derived chemokine (MDC). The
 CC invention provides a novel method of treating or preventing lentivirus
 CC (LV) infection or replication in a human subject, that comprises
 CC administering to the subject a composition comprising MDC or a derivative
 CC of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The
 CC products can be used for treating or preventing LV infection or
 CC replication, particularly HIV infection or replication. The products can
 CC also be used for the prognosis for a LV infection. The products can
 CC infection using the MDC as a prognostic indicator. The methods can also
 CC be used with other LVs, e.g. simian immunodeficiency virus, feline
 CC immunodeficiency virus and bovine immunodeficiency virus.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 489; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;

QY 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
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 DB 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
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 DB 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 9
 AAB07500
 ID AAB07500 standard; Protein; 93 AA.
 XX
 AC AAB07500;
 XX
 DT 20-OCT-2000 (first entry)
 XX
 DE A human monokine derived chemokine.
 XX
 KW Systemic memory T cell; CCR4; TARC; integrin dependent arrest;
 KW thymus and activation-regulated chemokine; vascular receptor;
 KW MDC; monokine derived chemokine; adhesion trigger; inflammation.
 XX
 OS Homo sapiens.
 XX
 PN W0200041724-A1.
 XX
 PD 20-JUL-2000.
 XX
 PF 14-JAN-2000; 2000WO-US00953.
 XX
 PR 15-JAN-1999; 99US-0232878.
 XX
 PA (STRD) UNIV LELAND STANFORD JUNIOR.
 PA (LEUK-) LEUKOSITE INC.
 XX
 PI Butcher EC, Campbell JJ, Wu L, Rottman JB;
 XX
 DR WPI; 2000-475957/41.
 DR N-PSDB; AAA58874.
 XX
 PT Modulating the trafficking of systemic memory T cells in mammals by
 PT administering a CCR4 modulating agent, useful for the treatment of
 PT inflammation -
 XX
 PS Disclosure; Page 38; 39pp; English.
 XX
 XX The specification describes a method of modulating the trafficking of
 CC systemic memory T cells in a mammalian host. The method comprises
 CC administering a CCR4 modulating agent. It has been found that systemic
 CC T cells such as express high levels of CCR4. Ligands of CCR4 such as
 CC TARC (thymus and activation-regulated chemokine) and MDC (monokine
 CC derived chemokine) act as an adhesion trigger and, upon CCR4 binding,
 CC these cells undergo integrin dependent arrest to the appropriate
 CC vascular receptors. This arrest acts to localize the cells at the
 CC target site. The method modulates this triggering and CCR4 mediated
 CC chemotaxis to affect the localization of T cells in targeted tissues.
 CC The active agent may be a CCR4 agonist that acts to enhance T cell
 CC localization. Alternatively, it may be an antagonist that blocks CCR4
 CC biological activity. A CCR4 antagonist may be administered for the
 CC treatment of inflammation. The present sequence represents a human MDC.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 489; DB 21; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||
 DB 1 MARLQATALLVLLVLLAVLALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 ID AAO14046 standard; Protein; 93 AA.
 XX AAO14046;
 AC AAO14046;
 DT 08-MAY-2002 (first entry)
 DE Human macrophage-derived C-C chemokine (MDC).
 XX Human; macrophage-derived C-C chemokine; MDC; immune system;
 KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;
 KW infection; inflammation; macrophage; Crohn's disease;
 KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;
 KW chemotherapy; radiation therapy; tumour.
 XX Homo sapiens.
 OS
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24 /note= "Signal peptide"
 FT Protein 25..93
 FT /note= "Mature macrophage-derived C-C chemokine, this is
 a specifically claimed region"
 FT Misc-difference 25..39
 FT /note= "Specifically claimed region"
 XX
 US6320023-B1.
 PN
 XX 20-NOV-2001.
 PD
 XX
 XX 07-JUN-1995; 95US-0479603.
 PF
 XX 07-JUN-1995; 95US-0479603.
 PR
 XX (ICOS-) ICOS CORP.
 PA
 XX Godiska R, Gray PW;
 PI WPI; 2002-074410/10.
 XX N-PSDB; AAK98372.
 DR
 XX Macrophage derived C-C chemokines useful in medical imaging and for the
 development of agents for controlling inflammation
 PT
 XX Claim 1; Fig 1; 22pp; English.
 PS
 XX The present sequence represents a novel human macrophage-derived C-C
 chemokine (MDC) of the invention. Chemokines comprise a family of small
 secreted proteins which attract and activate leukocytes, thereby aiding
 in the stimulation and regulation of the immune system. C-C cytokines are
 a subfamily known to activate monocytes, causing calcium flux and
 chemotaxis. The invention comprises a novel human MDC protein and nucleic
 acids, as well as methods for the production of the MDC protein. The MDC
 of the invention is useful in medical imaging (e.g. for imaging sites of
 infection, inflammation, and other sites having C-C chemokine receptor
 molecules. Inhibition of MDC is believed to be useful in treating
 diseases involving macrophages (e.g. Crohn's disease, rheumatoid
 arthritis or atherosclerosis). Alternatively, augmenting the effects of
 MDC is believed to be beneficial towards wound healing and angiogenesis.
 CC Also MDC or MDC agonists may be beneficial to patients receiving
 CC chemotherapy or radiation therapy and in the treatment of tumours.
 XX Sequence 93 AA;
 SQ
 Query Match 100.0%; Score 489; DB 23; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQATALLVLLVLAVALQATAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
 DB 1 MARLQATALLVLLVLAVALQATAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 RESULT 11
 AAW07604
 ID AAW07604 standard; Protein; 93 AA.
 XX
 AC AAW07604;
 DT 03-SEP-1997 (first entry)
 DE Cytokine beta-13 stimulates migration/activation of immune cells.
 XX
 KW Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 KW defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 KW T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 KW Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 KW leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 KW rheumatoid arthritis; silirosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 45 /note= "given as encoded by CAC codon in AAT44026"
 FT
 FT
 PN WO9639521-A1.
 XX
 XX 12-DEC-1996.
 PD
 XX
 XX 06-JUN-1995; 95WO-US07294.
 PF
 XX
 XX 06-JUN-1995; 95WO-US07294.
 PR
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 XX
 PI Li H, Seibel G;
 XX
 DR WPI; 1997-043143/04.
 DR N-PSDB; AAT44026.
 XX
 XX Human chemokine beta-13 - useful for treating solid tumours,
 PT leukaemia, infections, autoimmune disease, fibrotic disorders,
 PT psoriasis, etc.
 XX
 PS Claim 10; Page 46; 58pp; English.
 XX
 CC AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 CC C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 CC treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 CC stimulates the invasion and activation of host defence cells making it
 CC useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 CC enhancing resistance to acute and chronic infections, e.g. mycobacterial
 CC infections. The chemokine induces chemotactic migration of monocytes,
 CC neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 CC sites where they are needed. Eosinophils may be attracted to the site
 CC of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 CC recruits debris-clearing and connective tissue promoting inflammatory
 CC cells, and is therefore used to stimulate wound healing, prevent
 CC scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 CC fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 CC mediated autoimmune diseases, psoriasis, to regulate hematopoiesis and
 CC to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 CC chemokine which is useful for treating certain autoimmune diseases,

CC atherosclerosis, chronic inflammatory and infective diseases, allergic
 CC reactions, rheumatoid arthritis, silicosis and bone marrow failure.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 18; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVHKHFYWTSDSC 60
 |||||
 DB 1 MARLQTALLVLLVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVHKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 12
 AAW57881
 ID AAW57881 standard; Protein; 93 AA.

XX AC AAW57881;
 XX DT 23-SEP-1998 (first entry)
 XX DE Human chemokine beta-13.

XX Chemokine beta-13; human; CKbeta-13; immune system-related disorder;
 KW tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 KW autoimmune disease; bone marrow stem cell colony formation inhibitor;
 KW haematopoiesis regulator; therapy.

XX Homo sapiens.
 XX WO9824908-A1.
 XX PN 11-JUN-1998.
 XX PD 05-DEC-1997; 97WO-US23144.
 XX PF 05-DEC-1996; 96US-0032432.
 XX PR (HUMA-) HUMAN GENOME SCI INC.
 XX PA Li H, Seibel G;

XX PI WPI: 1998-333327/29.
 XX DR N-PSDB; AAV40786.
 XX Human chemokine beta-13 polypeptide - useful in diagnosis and
 PT treatment of immune-system related disorders e.g. cancer of the
 PT immune system, leukaemias, autoimmune diseases etc.
 XX Claim 18; Fig 1; 86pp; English.

XX This sequence is the human chemokine beta-13 (CKbeta-13) of the
 CC invention. The polypeptide and nucleic acid are useful in diagnosis
 CC and treatment of immune system-related disorders in mammals (preferably
 CC humans). Such disorders include tumours, cancers, interstitial lung
 CC disease and dysregulation of immune cell function including leukaemias,
 CC lymphomas, autoimmune diseases etc. For example, certain tissues in
 CC mammals with cancer of the immune system express enhanced/decreased
 CC levels of CKbeta-13 and mRNA encoding CKbeta-13, and diagnosis can be
 CC achieved by assaying CKbeta-13 gene expression and comparing to
 CC standard levels. The polypeptides can be administered therapeutically in
 CC pharmaceutical compositions e.g. to treat immune system-related disorders
 CC as above, treat sepsis, inhibit bone marrow stem cell colony formation
 CC during cancer therapy, regulate haematopoiesis, stimulate wound healing
 CC etc. Compositions comprising the polynucleotides may also be
 CC administered, especially to express CKbeta-13 polypeptide in hosts to
 CC treat dysfunctions associated with aberrant endogenous CKbeta-13
 CC activity. The polynucleotides are also useful for mapping of

CC chromosomes/chromosome sites. The polypeptides are useful to screen for
 CC agonists and antagonists of CKbeta-13 activity. The antibodies are
 CC useful diagnostically or therapeutically e.g. as antagonists to treat
 CC subjects requiring CKbeta-13 reduction.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 19; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVHKHFYWTSDSC 60
 |||||
 DB 1 MARLQTALLVLLVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVHKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 13
 AAB68352
 ID AAB68352 standard; Protein; 93 AA.

XX AC AAB68352;
 XX DT 09-JUL-2001 (first entry)
 XX DE Amino acid sequence of human chemokine beta-13 polypeptide.

XX Chemokine beta-13; CKbeta-13; Addison's disease; haemolytic anaemia;
 KW rheumatic arthritis; dermatitis; allergic encephalomyelitis;
 KW glomerulonephritis; Goodpasture's Syndrome; Grave's Disease;
 KW multiple sclerosis; allergic reaction; asthma; anaphylaxis;
 KW hypersensitivity; blood group incompatibility; organ rejection;
 KW graft vs host disease; inflammatory disorder; septic shock;
 KW infectious diseases; immune system relative disorder; leukemia;
 KW wound healing; inflammatory bowel disease; cancer; psoriasis;
 KW hypervascular disease; hyperproliferative disorder; atherosclerosis;
 KW bone marrow failure; inflammation.

XX Homo sapiens.
 XX WO200132128-A2.
 XX PN 10-MAY-2001.
 XX PD 02-NOV-2000; 2000WO-US30237.
 XX PF 03-NOV-1999; 99US-0432768.
 XX PR (HUMA-) HUMAN GENOME SCI INC.
 XX PA (BGHM) BRIGHAM & WOMENS HOSPITAL INC.
 XX PA (SMIK) SMITHKLINE BEECHAM CORP.

XX Ullrich S, Seibel G, Li H, Lusinskas FW;
 XX WPI: 2001-316379/33.
 XX DR N-PSDB; AAF85169.

XX Novel human chemokine beta-13 polypeptides useful for treating
 PT autoimmune diseases, inflammatory diseases, infectious diseases,
 PT allergic conditions, hypervascular diseases, tumors and for wound
 PT healing -

XX Claim 18; Fig 1; 220pp; English.

XX The present sequence represents a human chemokine beta-13 (CKbeta-13).
 CC CKbeta-13 polypeptides and polynucleotides are useful for treating
 CC deficiencies or disorders of immune systems, haematopoietic cells,
 CC autoimmune disorders such as Addison's disease, haemolytic anaemia,
 CC rheumatic arthritis, dermatitis, allergic encephalomyelitis,
 CC glomerulonephritis, Goodpasture's Syndrome, Grave's Disease and multiple

CC sclerosis, allergic reactions such as asthma, anaphylaxis,
 CC hypersensitivity, blood group incompatibility, organ rejection, graft
 CC vs host disease, inflammatory disorders including septic shock, sepsis
 CC or systemic inflammatory response syndrome, infectious diseases, immune
 CC system relative disorders including leukemia, wound healing, acute and
 CC chronic infection and inflammatory bowel disease, cancers, psoriasis,
 CC hypervascular diseases, hyperproliferative disorders, atherosclerosis
 CC and bone marrow failure. They are also useful for modulating haemostatic
 CC or thrombolytic activity, for diagnosing infectious agents, modulate
 CC inflammation, inhibit bone marrow stem cells, colony formation, inhibit
 CC proliferation and differentiation of haematopoietic cells, inhibit
 CC epidermal keratinocyte proliferation, as anti-neovascularisation agent,
 CC enhance host defences, inhibit T-cell proliferation, prevent scarring
 CC during wound healing, increasing eosinophils, mobilize bone marrow stem
 CC cells, inhibit cell growth and inhibit chemotaxis and activation of
 CC macrophages.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 22; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93

RESULT 14

AA05879
 ID AAY05879 standard; Protein; 93 AA.

XX
 AC AAY05879;

XX
 DT 02-AUG-1999 (first entry)

XX Human macrophage-derived C-C chemokine MDC analogue.

XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX Homo sapiens.
 OS Synthetic.

XX
 FH Key Location/Qualifiers
 FT Misc-difference 26
 FT /note= "not Pro"

XX W09915666-A2.

XX
 PN 01-APR-1999.

XX 28-SEP-1998; 98WO-US20270.

XX 28-APR-1998; 98US-0067447.

PR 26-SEP-1997; 97US-0939107.

XX (ICOS-) ICOS CORP.

XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX WPI; 1999-254715/21.

XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists

PT Disclosure; Page 144; 147pp; English.

PS

XX The present sequence represents a synthetic analogue of the novel
 CC human macrophage derived C-C chemokine MDC (see also AAY05871). The
 CC analogue has an amino acid substitution at residue 2 of the mature
 CC polypeptide. MDC analogues (see also AAY05872-75) are expected to be
 CC antagonists of MDC, inhibiting activity by competitively binding to
 CC the receptor that recognises MDC or forming inactive heterodimers
 CC with MDC. MDC antagonists are used in claimed methods for the
 CC preparation of medicaments for the suppression of the proliferation
 CC of a mammalian immunodeficiency virus, for inhibiting platelet
 CC aggregation in a mammal, for the treatment or palliation of lupus
 CC erythematosus in a mammal, for inhibiting MDC-induced activation,
 CC chemotaxis or proliferation of cells that express CCR4, for
 CC inhibiting or palliating an allergic reaction in a mammal, and for
 CC treating asthma.

XX Sequence 93 AA;

Query Match 98.2%; Score 480; DB 20; Length 93;
 Best Local Similarity 98.9%; Pred. No. 3.2e-50;
 Matches 92; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93

RESULT 15

AA05880
 ID AAY05880 standard; Protein; 93 AA.

XX
 AC AAY05880;

XX
 DT 02-AUG-1999 (first entry)

XX Macaque macrophage-derived C-C chemokine MDC.

XX MDC; macrophage derived chemokine; C-C chemokine; macaque;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX Macaca sp.

XX
 OS
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /note= "signal peptide"
 FT Protein 25..93
 FT /note= "mature protein"

XX W09915666-A2.

XX
 PN 01-APR-1999.

XX 28-SEP-1998; 98WO-US20270.

XX 28-APR-1998; 98US-0067447.

PR 26-SEP-1997; 97US-0939107.

XX (ICOS-) ICOS CORP.

XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX WPI; 1999-254715/21.

XX N-PSDB; AAX58338.

XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists

PT

PS Claim 5; Page 147; 147pp; English.

XX The present sequence represents a novel macaque C-C chemokine,
CC designated macrophage derived chemokine (MDC), that binds to the
CC CCR4 chemokine receptor. Macaque MDC shows about 94% amino acid
CC sequence identity to human MDC. The invention provides vertebrate
CC MDC polypeptides (see also AAY05871, AAY05876 and AAY05877) and isolated
CC polynucleotides encoding them, vectors and host cells, and methods
CC for the recombinant or synthetic production of MDC. Also provided
CC are MDC analogues, antibodies and antagonists. The MDC antagonists
CC are used for the preparation of medicaments for the suppression of
CC the proliferation of a mammalian immunodeficiency virus, for
CC inhibiting platelet aggregation in a mammal, for the treatment or
CC palliation of lupus erythematosus in a mammal, for inhibiting
CC MDC-induced activation, chemotaxis or proliferation of cells that
CC express CCR4, for inhibiting or palliating an allergic reaction in
CC a mammal, and for treating asthma (all claimed). MDC polypeptides
CC are also used in claimed vaccine compositions.

XX SQ Sequence 93 AA;

Query Match 94.7%; Score 463; DB 20; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.6e-48;

Matches 87; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

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Db 1 MARLQTVFLGVLILLVAQLQATEAGPYGANMEDSVCCRDYVRYRMLPLRVVVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPWVKMLNKLQ 93

Db 61 PRPGVLLTFRDKEICADPRVPWVKMLNKLQ 93

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OM protein - protein search, using sw model

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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6: /cgn2_6/ptodata/1/1aa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	489	100.0	93	1 US-08-480-449-2	Sequence 2, Appli
2	489	100.0	93	2 US-08-660-542-2	Sequence 2, Appli
3	489	100.0	93	3 US-09-232-878-6	Sequence 6, Appli
4	489	100.0	93	4 US-08-479-603-2	Sequence 2, Appli
5	489	100.0	93	5 PCT-US95-07294-2	Sequence 2, Appli
6	445	91.0	93	2 US-08-660-542-25	Sequence 25, Appli
7	386	78.9	70	2 US-08-660-542-30	Sequence 30, Appli
8	374	76.5	69	2 US-08-660-542-31	Sequence 31, Appli
9	362	74.0	69	2 US-08-660-542-32	Sequence 32, Appli
10	164	33.5	95	4 US-09-230-637-26	Sequence 26, Appli
11	159	32.5	89	1 US-08-208-339A-4	Sequence 4, Appli
12	159	32.5	89	3 US-08-722-719-6	Sequence 6, Appli
13	157	32.1	89	4 US-09-334-951-6	Sequence 6, Appli
14	153	31.3	78	1 US-08-375-346A-6	Sequence 6, Appli
15	153	31.3	78	2 US-08-467-123B-6	Sequence 6, Appli
16	151.5	31.0	91	1 US-08-480-449-21	Sequence 21, Appli
17	151.5	31.0	91	2 US-08-660-542-21	Sequence 21, Appli
18	151.5	31.0	91	4 US-08-679-493A-155	Sequence 155, App
19	151.5	31.0	91	4 US-08-479-603-21	Sequence 21, Appli
20	150.5	30.8	90	4 US-09-230-637-40	Sequence 40, Appli
21	150.5	30.8	91	1 US-08-347-492B-12	Sequence 12, Appli
22	150.5	30.8	91	1 US-08-375-346A-5	Sequence 5, Appli
23	150.5	30.8	91	2 US-08-633-682-3	Sequence 3, Appli
24	150.5	30.8	91	2 US-08-421-144A-8	Sequence 8, Appli
25	150.5	30.8	91	2 US-08-798-143-12	Sequence 12, Appli
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27	150.5	30.8	91	3 US-08-936-772-3	Sequence 3, Appli

28	150.5	30.8	91	4 US-08-836-922-14	Sequence 14, Appli
29	150.5	30.8	91	4 US-09-395-918-3	Sequence 3, Appli
30	150.5	30.8	91	4 US-09-230-371A-25	Sequence 25, Appli
31	150.5	30.8	94	4 US-09-230-371A-21	Sequence 21, Appli
32	147	30.1	91	2 US-08-633-682-5	Sequence 5, Appli
33	147	30.1	91	3 US-08-936-772-5	Sequence 5, Appli
34	147	30.1	91	4 US-09-395-918-5	Sequence 5, Appli
35	147	30.1	91	4 US-08-679-493A-156	Sequence 156, App
36	144.5	29.6	104	4 US-08-744-419-2	Sequence 2, Appli
37	143	29.2	70	4 US-09-334-951-65	Sequence 65, Appli
38	141	28.8	93	1 US-08-173-209A-2	Sequence 2, Appli
39	141	28.8	93	1 US-08-347-492B-6	Sequence 6, Appli
40	141	28.8	93	2 US-08-798-143-6	Sequence 6, Appli
41	141	28.8	93	3 US-08-722-719-2	Sequence 2, Appli
42	141	28.8	93	4 US-09-180-077-7	Sequence 7, Appli
43	141	28.8	93	4 US-09-334-951-2	Sequence 2, Appli
44	141	28.8	93	5 PCT-US95-15484-6	Sequence 6, Appli
45	140.5	28.7	92	4 US-09-195-106-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 568927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER-READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480.449
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-449-2

Query Match 100.0%; Score 489; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQATLLVLLVLAVALQATEAGPYCANMEDSVCCRDYVRYRLPLRVVKKHFWYTSDC 60
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Db 1 MARLQATLLVLLVLAVALQATEAGPYCANMEDSVCCRDYVRYRLPLRVVKKHFWYTSDC 60
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QY 61 PRPGVLLTFRDKCICADPRVPWVKMILNKLSQ 93

```
Db 61 PRPGVLLTFRDKICADPRVPWVKMLNLSQ 93
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RESULT 2
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-660-542-2

Query Match 100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
|||||
Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
|||||
Qy 61 PRPGVLLTFRDKICADPRVPWVKMLNLSQ 93
|||||
Db 61 PRPGVLLTFRDKICADPRVPWVKMLNLSQ 93
|||||

RESULT 4
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-603-2

Query Match 100.0%; Score 489; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
|||||
Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
|||||
Qy 61 PRPGVLLTFRDKICADPRVPWVKMLNLSQ 93
|||||
Db 61 PRPGVLLTFRDKICADPRVPWVKMLNLSQ 93
|||||

RESULT 3
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
```

Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLSQ 93

RESULT 5

PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 100.0%; Score 489; DB 5; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLRVVKKHFYWTSDSC 60
Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLSQ 93

RESULT 6

US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; NUMBER OF SEQUENCES: 32

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature

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; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE: misc_feature
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-08-660-542-25
Query Match 91.0%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 MARIQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSC 60
Db 1 MARIQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPVVKMILNLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPVVKMILNLSQ 93
RESULT 7
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-660-542-25
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; MOLECULE TYPE: peptide
; US-08-660-542-30
Query Match 78.9%; Score 386; DB 2; Length 70;
Best Local Similarity 100.0%; Pred. No. 2.9e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 25 GPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVW 84
Db 2 GPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVW 61
Qy 85 KMILNLSQ 93
Db 62 KMILNLSQ 70
RESULT 8
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31
Query Match 76.5%; Score 374; DB 2; Length 69;
Best Local Similarity 97.1%; Pred. No. 9.1e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 25 GPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVW 84
Db 1 GPYGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
```


; ADDRESS: INCYTE

ADDRESSEE: INCYTE PHARMACEUTICALS, INC.

STREET: 3330 HILLVIEW AVENUE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/375.346A
FILING DATE: 19-JAN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LUTHER, BARBARA J.
REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET NUMBER: PF-0026 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 855-0555
TELEFAX: (415) 855-0572
TELEX:
INFORMATION FOR SEQ ID NOS: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
US-08-375-346A-6

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Query Match          31.3%; Score 153; DB 1; Length 78;
Best Local Similarity 37.8%; Pred. No. 5.1e-12;
Matches 31; Conservative 16; Mismatches 29; Indels 6; Gaps 2;

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      ||||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Ddb      2  LAALLLVLVCTMALC-----SCAQVGTKNE--LCCLVYTSWQIQKTVDSYSETSPQCPK 55

QY      64  GVVLLTFRDKCAIDPRVPWVK 85

Ddb      56  GVILLTKRGROICADPNKKWVO 77
      ||:|||| | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|

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RESULT 15
US-08-467-123B-6
; Sequence 6, Application US/08467123B
; Patent No. 5945506
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig C.
; APPLICANT: Sellhamer, Jeffrey J.
; TITLE OF INVENTION: CHEMOKINE EXPRESSED I
; TITLE OF INVENTION: ITS PRODUCTION AND US
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS

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; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,123B
; FILING DATE: 06-JUN-1995.
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375,346
; FILING DATE: 19-JAN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-555-0555
; TELEFAX: 415-845-4166
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-467-123B-6

Query Match 31.3%; Score 153;
Best Local Similarity 37.8%; Pred. No. 5.1
Matches 31; Conservative 16; Mismatches

QY 4 LQTALLVVLVLLAVALQATEAGPYGANMEDSV
Db 2 LAAALLVLCVTALC-----SCAQVGTNKE--LD
QY 64 GVLLTFRDKETICADPRVPVWK 85
Db 56 GVLLTFRGRCICADPNKKVQ 77

Job completed: July 28, 2003, 04:05:36
Job time : 9.81513 secs

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Result No.	Score	Query		Length	DB	ID	Description
		Match					
1	489	100.0	93	10	US-09-837-446-6		Sequence 6, Appli
2	489	100.0	93	11	US-09-811-088-2		Sequence 2, Appli
3	489	100.0	93	15	US-10-314-410-2		Sequence 2, Appli
4	484	99.0	93	10	US-09-908-599-2		Sequence 2, Appli
5	484	99.0	93	10	US-09-908-600-2		Sequence 2, Appli
6	268	54.8	68	15	US-10-001-221A-3		Sequence 3, Appli
7	214.5	43.9	67	15	US-10-001-221A-7		Sequence 7, Appli
8	213	43.6	37	10	US-09-864-761-43730		Sequence 43730, A
9	159	32.5	89	10	US-09-334-923A-6		Sequence 6, Appli
10	159	32.5	89	10	US-09-334-954A-6		Sequence 6, Appli
11	159	32.5	97	10	US-09-925-302-792		Sequence 792, App
12	153	31.3	71	10	US-09-144-838-3		Sequence 3, Appli
13	153	31.3	78	15	US-10-058-366-6		Sequence 6, Appli
14	152	31.1	78	15	US-10-001-221A-6		Sequence 6, Appli
15	152	31.1	89	10	US-09-834-795A-34		Sequence 34, Appl
16	152	31.1	89	12	US-09-834-794A-34		Sequence 34, Appl

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; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearling, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match      100.0%; Score 489; DB 11; Length 93;
Best Local Similarity 100.0%; Pred. No. 7.3e-50;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
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Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
    |||||||

Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearling, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
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; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match      100.0%; Score 489; DB 15; Length 93;
Best Local Similarity 100.0%; Pred. No. 7.3e-50;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
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Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
    |||||||

Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
    |||||||

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PFI77P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match      99.0%; Score 484; DB 10; Length 93;
Best Local Similarity 98.9%; Pred. No. 2.8e-49;
Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
    |||||||
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
    |||||||

Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
    |||||||

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,
```



```

RESULT 9
US-09-334-923A-6
: Sequence 6, Application US/09334923A
: Patent No. US20020061551A1
: GENERAL INFORMATION:
: APPLICANT: Ruben, Steven M.
: APPLICANT: Li, Haodong
: TITLE OF INVENTION: Macrophage Inflammation
: FILE REFERENCE: 1488 033000D
: CURRENT APPLICATION NUMBER: US/09/334,923A
: CURRENT FILING DATE: 1999-06-17
: PRIOR APPLICATION NUMBER: US 08/208,339
: PRIOR FILING DATE: 1994-03-08
: PRIOR APPLICATION NUMBER: US 08/446,881
: PRIOR FILING DATE: 1995-05-05
: PRIOR APPLICATION NUMBER: US 08/465,682
: PRIOR FILING DATE: 1995-06-06
: PRIOR APPLICATION NUMBER: US 08/468,775
: PRIOR FILING DATE: 1995-06-06
: PRIOR APPLICATION NUMBER: US 08/722,719
: PRIOR FILING DATE: 1996-09-30
: NUMBER OF SEQ ID NOS: 65
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 6
: LENGTH: 89
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-334-923A-6

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```

RESULT 11
US-09-925-302-792
; Sequence 792, Application US/09925302
; Patent No. US2002004941A1
; GENERAL INFORMATION:
;   APPLICANT: Rosen et al.
;   TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;   FILE REFERENCE: PA104
;   CURRENT APPLICATION NUMBER: US/09/925, 302
;   CURRENT FILING DATE: 2001-08-10
;   PRIOR APPLICATION NUMBER: PCT/us00/05918
;   PRIOR FILING DATE: 2000-03-08
;   PRIOR APPLICATION NUMBER: 60/124,270
;   PRIOR FILING DATE: 1999-03-12
;   NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0

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QY 83 WVKMILNKLQ 93
||: : | |
Db 61 WVRDSMKHLDQ 71

RESULT 15
US-09-834-795A-34
; Sequence 34, Application US/09834795A
; Patent No. US20020076710A1
; GENERAL INFORMATION:
; APPLICANT: Lawrence, Papsidero
; APPLICANT: Lyn, Dyster
; APPLICANT: Jana, Frustaci
; TITLE OF INVENTION: Detection and Treatment of Breast Cancer
; FILE REFERENCE: 3380/11127-US3
; CURRENT APPLICATION NUMBER: US/09/834,795A
; CURRENT FILING DATE: 2001-04-12
; PRIOR APPLICATION NUMBER: 09/146,580
; PRIOR FILING DATE: 1998-09-03
; PRIOR APPLICATION NUMBER: 60/071,899
; PRIOR FILING DATE: 1998-01-20
; PRIOR APPLICATION NUMBER: 60/092,155
; PRIOR FILING DATE: 1998-07-09
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-834-795A-34

Query Match 31.1%; Score 152; DB 10; Length 89;
Best Local Similarity 35.2%; Pred. No. 1.9e-10;
Matches 32; Conservative 18; Mismatches 35; Indels 6; Gaps 2;
QY 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLRVVYKHFWYTSQSC 60
| | |||: : | | | | : | | : | |
Db 1 MKGLAALLVLVCTMALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIYDYSQSC 54
QY 61 PRPGVLLTFRDKICADPRVPVVKMILNKL 91
|: |||: ||| | : | ||| |||: : |
Db 55 PRPGVILLTRGRODCADPNKKVQKYISDL 85

Search completed: July 28, 2003, 04:20:04
Job time : 14.6996 secs

[illegible]

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	489	100.0	93	1	PCT-US00-00953-6
2	489	100.0	93	8	US-08-464-594-2
3	489	100.0	93	8	US-08-479-620-2
4	489	100.0	93	9	US-08-558-658-2
5	489	100.0	93	11	US-08-760-127-3
6	489	100.0	93	12	US-08-820-364-2
					Sequence 6, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 3, Appli
					Sequence 2, Appli

ALIGNMENTS

ORGANISM: HOMO SAPIENS
PCT-US00-00953-6

1 MARLQTALLVLVLALLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRWKHFYWTSDSC 60
|||||
1 MARLQTALLVLVLALLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRWKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 2

US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 100.0%; Score 489; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFWYWTSDSC 60
Db 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFWYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 3

US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago

STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,620
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32628
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-620-2

Query Match 100.0%; Score 489; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFWYWTSDSC 60
Db 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFWYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 4

US-08-558-658-2
; Sequence 2, Application US/08558658
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/558,658
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33009

Qy	Qy	Qy
1	1	61
MARLOTALLVWLVLVAVALQATEAGPYGANMEDSYCCRDYVRYRLPRVVKHFYWTSDSC	MARLOTALLVWLVLVAVALQATEAGPYGANMEDSYCCRDYVRYRLPRVVKHFYWTSDSC	PRPGVWLTFRDKTEICADPRVPWVKWLNKLQ
60	60	93

ADDRESS: DNA Research Institute
STREET: 901 California Avenue
CITY: Palo Alto
STATE: California

COUNTRY: USA
ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/925,724
FILING DATE: 10-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-12

Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93

RESULT 8
US-08-931-764-2
Sequence 2, Application US/08931764
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
TITLE OF INVENTION: AS AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
TITLE OF INVENTION: OF LENTIVIRUS INFECTION
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931,764
FILING DATE: To be assigned
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Mirostock, S. Leslie

REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 8769-029
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-931-764-2
Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
RESULT 9
US-08-931-764B-2
Sequence 2, Application US/08931764B
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-Viral
TITLE OF INVENTION: Agent for the Treatment and Prevention of Lentivirus
FILE REFERENCE: MDC
CURRENT APPLICATION NUMBER: US/08/931,764B
CURRENT FILING DATE: 1997-09-16
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
US-08-931-764B-2
Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILKLSQ 93
RESULT 10
US-08-939-107-2
Sequence 2, Application US/08939107
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF
NUMBER OF SEQUENCES: 40

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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO.: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY:
LOCATION:
OTHER INFORMATION: /note = "human MD
US-09-067-447-2

Query Match      100.0%; Score 4899
Best Local Similarity 100.0%; Pred. No.
Matches          93; Conservative    0; Mismatch

QY   1 MARLQTALLVVLLAVLAALQATEAGPYGAN
Db   1 MARLQTALLVVLLAVLAALQATEAGPYGAN
QY   61 PRPGVLLTFRDKETCAIDPRVPWVKMLNKNK
Db   61 PRPGVLLTFRDKETCAIDPRVPWVKMLNKNK

RESULT 12
US-09-067-447-2
Sequence 2, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CH
TITLE OF INVENTION: ANALOGS AND ASSAY TO
TITLE OF INVENTION: AND THERAPEUTIC USES
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/939,107
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER FILING DATE: 1996-06-07
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/479,620
EARLIER FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2

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: Sequence 2, Application US/09067447A
: GENERAL INFORMATION:
: APPLICANT: Godiska, Ronald
: APPLICANT: Gray, Patrick W.
: APPLICANT: Report, Carol J.
: TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
: TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
: TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
: FILE REFERENCE: 27866/34404
: CURRENT APPLICATION NUMBER: US/09/067,447A
: CURRENT FILING DATE: 1998-04-28
: EARLIER APPLICATION NUMBER: 08/939,107
: EARLIER FILING DATE: 1997-09-26
: EARLIER APPLICATION NUMBER: 08/660,542
: EARLIER FILING DATE: 1996-06-07
: EARLIER APPLICATION NUMBER: 08/558,658
: EARLIER FILING DATE: 1995-11-16
: EARLIER APPLICATION NUMBER: 08/479,620
: EARLIER FILING DATE: 1995-06-07
: NUMBER OF SEQ ID NOS: 44
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 2

```

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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-067-447B-2

Query Match      100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
   |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
   |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
   |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 13
US-09-067-447B-2
; Sequence 2, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantray, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY:
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; LOCATION:
; OTHER INFORMATION: /note - "human MDC"
US-09-067-447B-2

Query Match      100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
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Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 14
US-09-509-165A-2
; Sequence 2, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT FILING DATE: 2000-06-12
; CURRENT APPLICATION NUMBER: US/09/509,165A
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-509-165A-2

Query Match      100.0%; Score 489; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVLLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
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Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 15
US-09-591-992-2
; Sequence 2, Application US/09591992
; GENERAL INFORMATION:
; APPLICANT: Gallo, Robert C.
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP
; CURRENT APPLICATION NUMBER: US/09/591,992
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
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; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-591-992-2

Query Match 100.0%; Score 489; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQTALLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLQTALLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLQ 93

Search completed: July 28, 2003, 04:14:53
Job time : 108.676 secs

Result No.	Query			DB	ID	Description
	Score	Match	Length			
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2	489	100.0	93	2	PCT-US02-35606-146	Sequence 146, App
3	489	100.0	93	2	PCT-US02-40891-473	Sequence 473, App
4	489	100.0	93	2	PCT-US02-40891-549	Sequence 549, App
5	489	100.0	93	2	PCT-US02-40891-638	Sequence 638, App
6	489	100.0	93	2	PCT-US02-40891-639	Sequence 639, App
7	489	100.0	93	2	PCT-US02-40891-640	Sequence 640, App
8	489	100.0	93	2	PCT-US02-40891-641	Sequence 641, App
9	489	100.0	93	12	US-10-314-410-2	Sequence 2, Appli
10	489	100.0	93	12	US-10-405-027-5105	Sequence 5105, Ap
11	489	100.0	93	12	US-10-445-790-2	Sequence 2, Appli
12	489	100.0	93	14	US-60-453-135-8659	Sequence 8659, Ap
13	489	100.0	93	14	US-60-453-050-8659	Sequence 8659, Ap
14	489	100.0	93	14	US-60-455-444-4765	Sequence 4765, Ap
15	489	100.0	93	14	US-60-465-241-4765	Sequence 4765, Ap
16	489	100.0	93	14	US-60-466-412-8659	Sequence 8659, Ap
17	484	99.0	93	12	US-10-285-573-2	Sequence 2, Appli
18	484	99.0	93	12	US-10-137-438A-2	Sequence 2, Appli
19	484	99.0	93	12	US-10-406-494-2	Sequence 2, Appli

; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match 100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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RESULT 6
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match 100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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DB 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
|||||

RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match 100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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DB 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10

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; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match      100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 9
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2
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Query Match      100.0%; Score 489; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 10
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: Patentin ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match      100.0%; Score 489; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 11
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines In DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2
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Search completed: July 28, 2003, 04:18:49
Job time : 34.8235 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-2

Perfect score: 489

Sequence: 1 MARLQATALLVLLVALQ.....EICADPRVPWVKMLNKLQ 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	489	100.0	93	1 SY22_HUMAN	O00626 homo sapien
2	334	68.3	92	1 SY22_MOUSE	O88430 mus musculus
3	160.5	32.8	90	1 SY04_CHICK	Q90826 gallus gall
4	159	32.5	89	1 SY18_HUMAN	P55774 h small ind
5	156	31.9	92	1 SY03_RAT	P50229 rattus norv
6	151.5	31.0	91	1 SY05_HUMAN	P13501 homo sapien
7	147	30.1	91	1 SY05_MOUSE	P30882 mus musculus
8	146.5	30.0	92	1 SY03_MOUSE	P10855 mus musculus
9	146.5	30.0	92	1 SY05_RAT	P50231 rattus norv
10	144.5	29.6	104	1 SY12_MOUSE	O62401 mus musculus
11	142.5	29.1	91	1 SY05_CAVPO	P97272 cavia porce
12	141	28.8	93	1 SY14_HUMAN	Q16627 homo sapien
13	140.5	28.7	92	1 SY04_RAT	P50230 rattus norv
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15	136	27.8	92	1 SY03_HUMAN	P10147 homo sapien
16	136	27.8	93	1 SY3L_HUMAN	P16619 homo sapien
17	135.5	27.7	91	1 SY05_BOVIN	O97919 bos taurus
18	134	27.4	94	1 VM12_KSHV	Q98157 kaposi's sa
19	133.5	27.3	92	1 SY04_MOUSE	P40977 mus musculus
20	131	26.8	99	1 SY08_HUMAN	P80075 homo sapien
21	130	26.6	120	1 SY02_CAVPO	Q08782 cavia porce
22	128.5	26.3	94	1 SY17_HUMAN	Q92583 homo sapien
23	127.5	26.1	99	1 SY07_HUMAN	P80098 homo sapien
24	126	25.8	113	1 SY15_HUMAN	Q16663 homo sapien
25	123.5	25.3	98	1 SY13_HUMAN	Q99616 homo sapien
26	121	24.7	98	1 SY19_HUMAN	Q99731 homo sapien
27	118.5	24.2	70	1 REGL_BOVIN	P82943 bos taurus
28	118.5	24.2	92	1 SY04_RABIT	P46632 oryctolagus
29	118.5	24.2	108	1 SY19_MOUSE	O70460 mus musculus
30	117	23.9	99	1 SY02_HUMAN	P13500 homo sapien
31	116	23.7	99	1 MCPA_BOVIN	P28291 bos taurus
32	116	23.7	99	1 SY02_MACFA	Q9my44 macaca fasc
33	116	23.7	99	1 SY08_PIG	P49873 sus scrofa

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	SCYA22 OR MDC OR A-152E5.1.			
GN	Homo sapiens (Human).			
OS	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OC				
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RA	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97460113; PubMed=9312138;			
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RA	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RA	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RC	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION.			
RX	MEDLINE=98104166; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RA	"Macrophage-derived chemokine is a functional ligand for the CC			

P52203 canis faml
P51671 homo sapien
O91kc0 mus musculu
O00175 homo sapien
P14844 rattus norv
O89093 mus musculu
Q92121 mus musculu
O9y258 homo sapien
Q09141 bos taurus
O00585 homo sapien
O15467 h small ind
P42831 sus scrofa

34 115 23.5 101 1 SY02_CANFA
35 114 23.3 97 1 EOTA_HUMAN
36 113 23.1 119 1 SY24_MOUSE
37 112 22.9 119 1 SY24_HUMAN
38 112 22.9 148 1 SY02_RAT
39 111 22.7 97 1 SY20_MOUSE
40 109.5 22.4 97 1 SY08_MOUSE
41 107.5 22.0 94 1 SY26_HUMAN
42 107 21.9 99 1 SY08_BOVIN
43 107 21.9 134 1 SY21_HUMAN
44 105.5 21.6 120 1 SY16_HUMAN
45 105 21.5 99 1 SY02_PIG

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chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1769(1998).
CC -|- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC use by non-profit institutions as long as its content is in no way
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U83171; AAB58360.1;
DR EMBL: U83239; AAB53372.1;
DR EMBL: AC004382; AAC24306.1;
DR EMBL: BC027952; AAH27952.1;
DR HSSP: Q98157; ICM9.
DR GENE: HGNC:10621; SCYA22.
DR MIM: 602957;
DR InterPro: IPR000827; CC_chemokine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR ProSITE: PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine: Chemotaxis; Signal.
FT SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 100.0%; Score 489; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 3.1e-48; Indels 0; Gaps 0;
Matches 93; Conservative 0; Mismatches 0;

QY 1 MARLQATLLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
DB 1 MARLQATLLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPVWVKMLNKLQ 93
DB 61 PRPGVLLTFRDKEICADPRVPVWVKMLNKLQ 93

RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

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[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seldl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -|- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: AF052505; AAC40200.1;
DR HSSP: Q98157; ICM9.
DR MGD: MGI:1306779; Scya22.
DR InterPro: IPR000827; CC_chemokine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR ProSITE: PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine: Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859861CDAE07CA CRC64;

Query Match 68.3%; Score 334; DB 1; Length 92;
Best Local Similarity 64.1%; Pred. No. 8.2e-31;
Matches 59; Conservative 19; Mismatches 14; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
DB 1 MATLRVPLLVLLVLLVLAVALQTS DAGPYGANVEDSICQDYIRHPLPLSRVLEFFWTSC 60
QY 61 PRPGVLLTFRDKEICADPRVPVWVKMLNKLKLS 92
DB 61 RKPGVLLTVKRDICADPRQVWVKLLHLKLS 92

RESULT 3
SY04_CHICK STANDARD; PRT; 90 AA.
AC Q90826; Q910C9;
DT 01-NOV-1997 (Rel. 35, Created)
DT 15-JUN-2002 (Rel. 41, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
DE protein 1-beta homolog).
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.

```

RC TISSUE-Bone marrow;
RX MEDLINE=95369710; PubMed=7642115;
RA Petrenko O., Ischenko I., Enrietto P.J.;
RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
RL mammalian macrophage inflammatory protein-1 beta.";
RL Gene 160:305-306(1995).
[2]
RN SEQUENCE FROM N.A.
RP
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
[3]
RN SEQUENCE OF 14-90 FROM N.A.
RP
RA Petrenko O., Enrietto P.J.;
RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
CC (BY SIMILARITY).
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).

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CC or send an email to license@isb-sib.ch).

DR EMBL; L34553; AAA48747.1; -
DR EMBL; AJ243034; CAB45103.1; -
DR HSSP; P13236; IHUM.
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_il8.
DR Pfam; PF00048; IL8; 1.
DR SMART; PS00472; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 21 BY SIMILARITY.
FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
FT DISULFID 32 56 BY SIMILARITY.
FT DISULFID 33 72 BY SIMILARITY.
FT CONFLICT 87 87 M -> L (IN REF. 1).
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match 32.88; Score 160.5; DB 1; Length 90;
Best Local Similarity 38.28; Pred. No. 2.6e-11;
Matches 34; Conservative 18; Mismatches 34; Indels 3; Gaps 3;

QY 3 RLQTALLVLLVLAVALQATEAGPYGANMEDSVCCRRVYRPLRPLRVKHFYWTSDSCPR 62
Db 2 KVSVALAVL-LIAICVQ-TSAAPVGSDDPPTS-CCFTYISRQLPFSFVADYIETNSQCPH 58

QY 63 PGVLLTFRDKICADPRVPWVKMLNKL 91
Db 59 AGVVFTRKREVCANPENDWQDYNKM 87

RESULT 4
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine 1) (AMAC-1) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.

OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Li H., Ruben S.;
RT "Macrophage inflammatory protein-3 and -4.";
RL Patent number US5504003, 02-APR-1996.
[2]
RN SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RP
RC TISSUE-Aorta, and Lung;
RX MEDLINE=97376836; PubMed=9233607;
RA Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
RA Miura R., Odenakker G., van Damme J., Yoshie O., Nomiya H.;
RT "A novel human CC chemokine PARC that is most homologous to
RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
RT T lymphocytes, but not for monocytes.";
RL J. Immunol. 159:1140-1149(1997).
[3]
RN SEQUENCE FROM N.A.
RP
RX MEDLINE=98230488; PubMed=9570561;
RA Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerd S.;
RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
RT structural homologue of macrophage inflammatory protein-1 alpha with
RT a Th2-associated expression pattern.";
RL J. Immunol. 160:1411-1418(1998).
[4]
RN DISCUSSION OF SEQUENCE.
RP
RX MEDLINE=97275308; PubMed=9129202;
RA Wells T.N.C., Peitsch M.C.;
RT "The chemokine information source: identification and characterization
RT of novel chemokines using the WorldWideWeb and expressed sequence tag
RT databases.";
RL J. Leukoc. Biol. 61:545-550(1997).
[5]
RN SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
RP
RC TISSUE-Dendritic cell;
RX MEDLINE=97336102; PubMed=912987;
RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
RA Figdor C.G.;
RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
RT naive T cells.";
RL Nature 387:713-717(1997).
[6]
RN SEQUENCE FROM N.A.
RP
RX MEDLINE=99168908; PubMed=1004593;
RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
RA Hughes A.L., Nomiya H.;
RT "Chemokine PARC gene (SCYA18) generated by fusion of two
RT MIP-1alpha/LD78alpha-like genes.";
RL Genomics 55:353-357(1999).
[7]
RN SEQUENCE FROM N.A., AND CHARACTERIZATION.
RP
RX MEDLINE=99189237; PubMed=10087196;
RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
RA Neote K., McCall S.R.;
RT "Genomic organization and biological characterization of the novel
RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
RL Genomics 56:296-302(1999).
[8]
RN SEQUENCE FROM N.A.
RP
RA Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerd S.;
RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
RT within the first intron sequence.";
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS

Db 2 KISAAASITVLVAAALCTPVPASPGS--DTTPCCFAYLSIALPRAHVKEYFTTSKCS 59

QY 62 RGVVLLTFRDKEICADPRVPWVKMLNKL 91

Db 60 NLAVVFTFRNRQVCANPEKWKQYINYL 89

RESULT 10

SY12_MOUSE STANDARD; PRT; 104 AA.

AC Q62401; O9QYD6;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A12 precursor (CCL12) (Monocyte chemotactic protein 5) (MCP-5) (MCP-1 related chemokine).

DE SCYAL2 OR MCP5.

GN SCYAL2 OR MCP5.

OS Mus musculus (Mouse).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX NCBI_TaxID=10090;

RN [1]

RP SEQUENCE FROM N.A.

RA MEDLINE=97079149; PubMed=8920881;

RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C., Wershil B.K., Gutierrez-Ramos J.C.;

RA "Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation.";

RT J. Exp. Med. 184:1939-1951(1996).

RN [2]

RN SEQUENCE FROM N.A.

RP MEDLINE=97149438; PubMed=8996246;

RP Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;

RT "Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human MCP-1.";

RT J. Exp. Med. 185:99-109(1997).

RN [3]

RP SEQUENCE FROM N.A.

RC STRAIN=B10.S/J, BALB/C, DBA/2J, NOD/LTJ, and SJL/J; TISSUE=Spleen;

RX MEDLINE=99370037; PubMed=10438970;

RA Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W., Blankenhorn E.P.;

RA "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scyal2 (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are candidates for eae7, a locus controlling susceptibility to monophasic remitting/nonrelapsing experimental allergic encephalomyelitis.";

RL J. Immunol. 163:2262-2266(1999).

CC -!- FUNCTION: CHEMOATTRACTANT FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.

CC -!- SUBUNIT: HOMODIMER (BY SIMILARITY).

CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES, BRAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

CC -!- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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DR EMBL; U50712; AAB50053.1; -

DR EMBL; U66670; AAB49424.1; -

DR EMBL; AF065934; AAF15384.1; -

DR EMBL; AF065935; AAF15385.1; -

DR EMBL; AF065936; AAF15386.1; -

DR EMBL; AF065937; AAF15387.1; -

DR EMBL; AF065938; AAF15388.1; -

DR HSP; P13500; IDOL.

DR MGD; MGI:108224; Scyal2.

DR InterPro; IPR000827; CC_chemokine_sml.

DR InterPro; IPR001811; Chemokine_IL8.

DR Pfam; PF00048; IL8; 1.

DR SMART; SM00199; SCY; 1.

DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

KW Cytokine; Chemotaxis; Signal; Inflammatory response.

FT SIGNAL 1 22 BY SIMILARITY.

FT CHAIN 23 104 SMALL INDUCIBLE CYTOKINE A12.

FT DISULFID 33 58 BY SIMILARITY.

FT DISULFID 34 74 BY SIMILARITY.

FT VARIANT 94 104 QTFLEPSCGLG -> RT (IN STRAIN SJL/J).

SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FC3DBF CRC64;

Query Match 29.6%; Score 144.5; DB 1; Length 104;

Best Local Similarity 35.1%; Pred. No. 1.9e-09;

Matches 34; Conservative 19; Mismatches 31; Indels 13; Gaps 4;

QY 3 RLQPTALLVLLVAVALQATGAPYGANWDSV-----CCRDYVRYRLPLRVVKHF-VWT 56

Db 2 KISTLLCLLLIATTTISQVL-AGP-----DAVSTPTVCYVNVKQKHVRKLSYRRIT 54

QY 57 SDSCPRGVLLTFRDKEICADPRVPWVKMLNKL 93

Db 55 SSQCPREAVIFRTILDKEICADPKKWKVNSINHLDR 91

RESULT 11

SY05_CAVPO STANDARD; PRT; 91 AA.

ID SY05_CAVPO

AC P97272; O09076;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).

DE SCYA5.

GN SCYA5.

OS Cavia porcellus (Guinea pig).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.

OX NCBI_TaxID=10141;

RN [1]

RP SEQUENCE FROM N.A.

RC STRAIN=Dunkin-Hartley;

RA Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B., Wells T.N.C., White A.M., Westwick J., Watson M.L.;

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.

RN [2]

RP SEQUENCE FROM N.A.

RC TISSUE=Lung;

RA Asano K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A., Yamaguchi K., Kanazawa M.;

RL Submitted (APR-1997) to the EMBL/GenBank/DBJ databases.

CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).

CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 17.1933 Seconds

(without alignments)
1114.528 Million cell updates/sec

Title: US-09-509-165a-2

Perfect score: 489

Sequence: 1 MARLQTALLVLLVLLAVALQ.....EICADPRVFWVKMILNKLQS 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL_21.*

1: sp_archaea.*

2: sp_bacteria.*

3: sp_fungi.*

4: sp_human.*

5: sp_invertebrate.*

6: sp_mammal.*

7: sp_mhc.*

8: sp_organelle.*

9: sp_phase.*

10: sp_plant.*

11: sp_rodent.*

12: sp_virus.*

13: sp_vertebrate.*

14: sp_unclassified.*

15: sp_rvirus.*

16: sp_bacteriap.*

17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	332	67.9	92	11 Q9QZU2	Q9qzu2 mus musculus
2	329	67.3	92	11 Q91ZH5	Q91zh5 rattus norv
3	315	64.4	81	11 Q9QZU1	Q9qzu1 rattus norv
4	164	33.5	95	12 Q98158	Q98158 kaposi's sa
5	161.5	33.0	90	13 Q9PWA6	Q9pwa6 gallus gall
6	160.5	32.8	90	13 Q91OC9	Q91oc9 gallus gall
7	160	32.7	91	13 Q8QG57	Q8qg57 gallus gall
8	159.5	32.6	92	11 Q91ZL0	Q91zl0 sigmodon hi
9	159	32.5	92	11 Q91Z65	Q91z65 sigmodon hi
10	155	31.7	89	13 Q91R60	Q91r60 gallus gall
11	147	30.1	92	6 Q8SQ40	Q8sq40 felis silve
12	142	29.0	93	6 Q8SQA6	Q8sqa6 bos taurus
13	139	28.4	91	11 Q91ZL1	Q91zll sigmodon hi
14	136	27.8	93	4 Q96168	Q96168 homo sapien
15	135	27.6	99	6 Q95N01	Q95n01 canis fami
16	127.5	26.1	93	11 Q9WUZ6	Q9wuz6 mus musculu

17	127.5	26.1	131	11 Q9R043	Q9r043 mus musculu
18	125	25.6	91	13 Q8QG56	Q8qg56 gallus gall
19	123.5	25.3	80	4 Q14745	Q14745 homo sapien
20	117.5	24.0	93	11 Q9ERE0	Q9ere0 rattus norv
21	109.5	22.4	79	4 Q95689	Q95689 homo sapien
22	107.5	22.0	133	11 Q91V84	Q91v84 mus musculu
23	107	21.9	100	6 Q95MD5	Q95md5 bos taurus
24	106	21.7	100	13 Q8QG55	Q8qg55 gallus gall
25	105	21.5	148	11 Q9QYD7	Q9qyd7 mus musculu
26	103	21.1	97	11 Q9Z318	Q9z318 cavia porce
27	102	20.9	116	11 Q9D830	Q9d830 mus musculu
28	101	20.7	100	6 Q9TTQ4	Q9ttq4 equus cabal
29	100.5	20.6	99	6 Q9TTQ3	Q9ttq3 equus cabal
30	100	20.4	97	6 Q9BDJ2	Q9bdj2 bos taurus
31	99	20.2	97	6 Q9TTS6	Q9tts6 bos taurus
32	98	20.0	116	11 Q9M24	Q9m24 mus musculu
33	97	19.8	106	11 Q9Z292	Q9z292 cricetus
34	96.5	19.7	75	6 Q9TTQ1	Q9ttq1 equus cabal
35	94	19.2	81	6 Q9TTQ2	Q9ttq2 equus cabal
36	92.5	18.9	115	12 Q9WRT7	Q9wrt7 macaca mula
37	88.5	18.1	96	6 Q8SQB1	Q8sqb1 bos taurus
38	88	18.0	98	13 Q8QGV8	Q8qgv8 paralichthy
39	88	18.0	118	12 Q9J2M1	Q9j2m1 macaca mula
40	87.5	17.9	109	13 Q9YF59	Q9yf59 paralichthy
41	84	17.2	92	4 Q9H554	Q9h554 homo sapien
42	83.5	17.1	395	11 Q91V44	Q91v44 mus musculu
43	82.5	16.9	100	13 Q9PT04	Q9pt04 oncorhynch
44	81.5	16.7	96	13 Q90825	Q90825 gallus gall
45	81	16.6	86	11 Q9QX28	Q9qx28 mus musculu

ALIGNMENTS

RESULT 1

Q9QZU2	PRELIMINARY;	PRT;	92 AA.
ID Q9QZU2			
AC Q9QZU2			
DT 01-MAY-2000 (Tremblrel. 13, Created)			
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)			
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)			
DE Macrophage-derived chemokine.			
GN SCYA22.			
OS Mus musculus (Mouse).			
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.			
OX NCBI_TaxID=10090;			
RN [1]			
RP SEQUENCE FROM N.A.			
RC STRAIN=BALB/C;			
RA Chantray D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,			
RA Gray P.W.;			
RT Macrophage derived chemokine is localized to thymic medullary			
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-			
RT thymocytes."			
RL Blood 0:0-0(1999).			
DR EMBL; AF163476; AAD55763.1;			
DR HSSP; Q98157; 1CM9.			
DR MGD; MGI:1306779; Scya22.			
DR InterPro; IPR001811; Chemokine_IL8.			
DR Pfam; PF00048; IL8; 1.			
DR SMART; SM00199; SCY; 1.			
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;			
Query Match	67.9%;	Score 332;	DB 11; Length 92;
Best Local Similarity	63.0%;	Pred. No. 1.4e-34;	
Matches	58;	Conservative	20; Mismatches 14; Indels 0; Gaps 0;

QY	1	MARLQTALLVLLVLLAVALQATENGPGYANMEDSVCCRDYVRYRLPLRVVVKHYWTSDSC	60
Db	1	MSNLRPVLLVLLVLLAVALQATSDGPGYANVEDSICQDYIRHPLPSRLVKEFFWTSKSC	60
QY	61	PRPGVLLTFRDKEICADPRVFWVKMILNKL	92

OS	Gallus gallus (Chicken).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC	Gallus.
OX	NCBI_TaxID=9031;
OX	[1]
RN	SEQUENCE FROM N.A.
RP	Hughes S.M., Bumstead N.;
RA	"Mapping of the gene encoding the chicken homologue of the mammalian
RT	chemokine SCYA4.";
RL	Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
DR	EMBL: AJ243034; CAB45103.1; -
DR	InterPro: IPR000827; CC_chemkine_sml.
DR	InterPro: IPR001811; Chemokine_IL8.
DR	Pfam: PF00048; IL8; 1.
DR	PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN1.
SQ	SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
Query Match 32.8%; Score 160.5; DB 13; Length 90;	
Best Local Similarity 38.2%; Pred. No. 1e-12;	
Matches 34; Conservative 18; Mismatches 34; Indels 3; Gaps	
Qy	3 RLQTALLVVLVLLAVALQATEAGPGCANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCP 62
Db	2 KVSVAALVL-LIAICYQ- -
Qy	63 PGVLLTFRDKEICADPRVPVVKMILNKL 91
Db	59 AGVVFTRKGREVCANPENDWVDYNNKM 87
- -	
- -	
RESULT 7	
Q8QG57	PRELIMINARY; PRT; 91 AA.
AC	Q8QG57;
DT	01-JUN-2002 (TrEMBLrel. 21, Created)
DT	01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT	01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE	Chemokine ah294.
OS	Gallus gallus (Chicken).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC	Gallus.
OX	NCBI_TaxID=9031;
OX	[1]
RP	SEQUENCE FROM N.A.
RX	MEDLINE=21655115; PubMed=11797102;
RA	Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT	"Identification, mapping, and phylogenetic analysis of three novel
RL	chicken CC chemokines.";
RT	Immunogenetics 53:674-683(2001).
DR	EMBL: AY037859; AAK84432.1; -
SQ	SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;
Query Match 32.7%; Score 160; DB 13; Length 91;	
Best Local Similarity 37.8%; Pred. No. 1.2e-12;	
Matches 34; Conservative 20; Mismatches 32; Indels 4; Gaps	
Qy	4 LQTALLVVLVLLAVALQATEA--GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCP 61
Db	1 MMTVAVSLISLLVAALFPQASSSPFGA--DTTCCFNFYSVRKLPQNHHVKDYFYTSKCP 58
Qy	62 RPCGVLLTFRDKEICADPRVPVVKMILNKL 91
Db	59 QAAVVFTRKRGVCANPDARWVKYINFL 88
- -	
- -	
RESULT 8	
Q91ZL0	PRELIMINARY; PRT; 92 AA.
ID	Q91ZL0
AC	Q91ZL0;
DT	01-DEC-2001 (TrEMBLrel. 19, Created)
DT	01-DEC-2001 (TrEMBLrel. 19, Last sequence update)

	01-MAR-2002	(TrEMBLrel. 20, Last annotation update)
DT	Macrophage inflammatory protein 1 beta.	
DE	MIP-IBETA.	
GN	Sigmodon hispidus (Hispid cotton rat).	
OS	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;	
CC	Sigmodon.	
OX	NCBI_TaxID=42415;	
RN	[1]	
RP	SEQUENCE FROM N.A.	
RA	Blanco J.C., Pietneva L.M., Prince G.A.;	
RT	"Sigmodon hispidus cytokines, chemokines and interferons.";	
RL	Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.	
DR	EBML; AF421392; AAL16933.1; -	
DD	InterPro; IPR000827; CC_Chemkine_sm1.	
DR	InterPro; IPR001811; Chemokine_IL8.	
DR	Pfam; PF00048; IL8; 1.	
DR	PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.	
DQ	SEQUENCE 92 AA; 10195 MW; A3AFD2E1B5FA9C2E CRC64;	
	Query Match 32.6%; Score 159.5; DB 11; Length 92;	
BEST	Local Similarity 39.3%; Pred. No. 1.4e-12;	
MTCHES	Matches 35; Conservative 13; Mismatches 40; Indels 1; Gaps 1;	
YQ	3 RLOATLVVLVLLAVALQAQTAGPYGANMEDSVCCRDIYRYLRPLRVVKHFYTSDSCPR 62 KCLSLTALLLLLAEFCAPVTSPRGSDPPIS-CFYSASRKLPNFVDIYETSSLCCK 60	
Db	K : : : : : : : : :	
YQ	63 PGVVLTFRDKETCADPVPVMKLNL 91 : : : : :	
Db	61 PAVVFETRKGKEVCADPSQPWANEYNDL 89 : : : : :	
RESULT 9		
Q91265	PRELIMINARY; PRT; 92 AA.	
ID	AU Q91265	
AC	Q91265;	
DT	01-DEC-2001 (TrEMBLrel. 19, Created)	
DD	01-DEC-2001 (TrEMBLrel. 19, Last sequence update)	
DE	01-MAR-2002 (TrEMBLrel. 20, Last annotation update)	
DT	Macrophage inflammatory protein-1 alpha.	
GN	MPI ALPHA.	
OS	Sigmodon hispidus (Hispid cotton rat).	
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;	
CC	Sigmodon.	
OX	NCBI_Taxid=42415;	
RN	[1]	
RP	SEQUENCE FROM N.A.	
RA	Blanco J.C., Pietneva L.M., Prince G.A.;	
RT	"Sigmodon hispidus cytokines, chemokines and interferons.";	
RL	Submitted (OCT-2001) to the EMBL/Genbank/DDBJ databases.	
DR	EBML; AY059407; AAL26704.1; -	
DR	InterPro; IPR000827; CC_Chemkine_sm1.	
DR	InterPro; IPR001811; Chemokine_IL8.	
DR	Pfam; PF00048; IL8; 1.	
DR	PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.	
DQ	SEQUENCE 92 AA; 10334 MW; CF9AA83D94DCAF79 CRC64;	
	Query Match 32.5%; Score 159; DB 11; Length 92;	
BEST	Local Similarity 33.7%; Pred. No. 1.6e-12;	
MTCHES	Matches 30; Conservative 22; Mismatches 35; Indels 2; Gaps 2;	
YQ	3 RLOATLVVLVLLAVALQAQTAGPYGANMEDSVCCRDIYRYLRPLRVVKHFYTSDSCPR 62 KKPTAVLAIVLCITILCNQVSFPAYGAD-TPTCECFSYGR-QIPRKFIAFYFTQSLSCE 59	
Db	: : : : : : : : :	
YQ	63 PGVVLTFRDKETCADPVPVMKLNL 91 : : : : :	
Db	60 PGIIFLTKRNHWCADPKRETWOEIIDL 88 : : : : :	
RESULT 10		

DB 59 NFAVVFVTRRNQVCANPKKKWVQEYINYL 88

Search completed: July 28, 2003, 04:02:51
Job time : 19.1933 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 17.916 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYCANM.....EICADPRVPWVKMILNKLQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_101002.*

- 1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
- 2: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
- 3: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
- 4: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
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- 11: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
- 12: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1991.DAT.*
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- 17: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1996.DAT.*
- 18: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
- 19: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
- 20: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
- 21: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
- 22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
- 23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	441	100.0	86	19 AAW59432	Human chemokine pr
2	441	100.0	93	18 AAW20058	Macrophage derived
3	441	100.0	93	19 AAW62783	Amino acid sequenc
4	441	100.0	93	19 AAW59433	Human chemokine pr
5	441	100.0	93	19 AAW40811	Macrophage-derived
6	441	100.0	93	20 AAY26175	Macrophage-derived
7	441	100.0	93	20 AAY24414	Human macrophage d
8	441	100.0	93	20 AAY05871	Human macrophage-d
9	441	100.0	93	20 AAY06829	Macrophage derived
10	441	100.0	93	21 AAB07500	A human monokine d

11	441	100.0	93	23 AAO14046	Human macrophage-d
12	436	98.9	93	18 AAW07604	Cytokine beta-13 s
13	436	98.9	93	19 AAW57881	Human chemokine be
14	436	98.9	93	22 AAB68352	Amino acid sequenc
15	432	98.0	93	20 AAY05879	Human macrophage-d
16	430	97.5	93	20 AAY05880	Macaque macrophage
17	397	90.0	93	18 AAW20059	Human macrophage d
18	397	90.0	93	20 AAY24417	Macrophage derived
19	397	90.0	93	20 AAY05872	Human macrophage-d
20	386	87.5	69	23 AAO20022	Human chemokine MD
21	386	87.5	69	23 AAO14155	Human MDC protein.
22	386	87.5	70	18 AAW20060	Human macrophage d
23	386	87.5	70	20 AAY24413	Macrophage derived
24	386	87.5	70	20 AAY05873	Human macrophage-d
25	386	87.5	154	20 AAY05878	Yeast pre-pro-alpha
26	386	87.5	172	20 AAY29895	Human MDC and huma
27	386	87.5	334	20 AAY29904	Human MDC and huma
28	386	87.5	587	20 AAY29900	Human MDC and HIV
29	380	86.2	68	18 AAW17668	Stem cell mobilisi
30	374	84.8	69	18 AAW20061	Human macrophage d
31	374	84.8	69	20 AAY24415	Macrophage derived
32	374	84.8	69	20 AAY05874	Human macrophage-d
33	362	82.1	69	18 AAW20062	Human macrophage d
34	362	82.1	69	20 AAY24416	Macrophage derived
35	362	82.1	69	20 AAY05875	Human macrophage-d
36	312	70.7	473	22 AAB61797	Chimeric chemokine
37	310	70.3	92	19 AAW59434	Mouse chemokine pr
38	310	70.3	92	20 AAY05876	Mouse macrophage-d
39	309	70.1	81	20 AAY05877	Rat macrophage-der
40	268	60.8	68	22 AAB61808	Murine MDC mature
41	268	60.8	68	23 AAG78392	Mouse chemokine m
42	268	60.8	68	23 AAG68355	Murine chemokine m
43	214.5	48.6	67	23 AAG78396	Human/mouse hybrid
44	214.5	48.6	67	23 AAG68359	Chimeric chemokine
45	213	48.3	37	22 AAB39053	Peptide #6359 enco

ALIGNMENTS

RESULT 1

AAW59432

ID AAW59432 standard; Protein; 86 AA.

XX

AC AAW59432;

XX 27-AUG-1998 (first entry)

DE Human chemokine protein 331D5 from CD1a+ cDNA library.

XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;

XX degenerative condition; abnormal proliferation; regeneration;

XX degeneration; atrophy.

OS Homo sapiens.

XX

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XX

XX

Key Location/Qualifiers

Peptide 1..15

FT /label= signal

FT /note= "partial signal sequence"

FT 16..86

FT /label= chemokine protein 331D5

XX

XX

XX

XX

XX

XX

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XX

XX

XX

XX

XX

XX

XX

PI Gorman DM, Hedrick JA, Zlotnik A;
 XX WPI; 1998-207387/18.
 DR N-PSDB; AAV34996.
 XX
 PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions
 XX
 PS Disclosure; Page 75; 82pp; English.
 XX
 CC This sequence represents a novel human chemokine protein, 33ID5 which has
 CC been isolated from a 90 per cent CD1a+ cDNA library and obtained by
 CC random sequencing. Nucleic acid sequences encoding the chemokines can be
 CC used for detection, in e.g. forensic techniques. Antibodies and other
 CC binding agents may be used in diagnostics. The chemokines themselves are
 CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
 CC proliferation, regeneration, degeneration or atrophy may be treated by
 CC the inventive compositions.
 XX
 SQ Sequence 86 AA;
 Query Match 100.0%; Score 441; DB 19; Length 86;
 Best Local Similarity 100.0%; Pred. No. 1.2e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LVLLAVALQATAGPYGANNMEDSVCCRDYVRYRLPLRVVKKHFTWTSDCPRGVVLLTFR 60
 DB 5 LVLLAVALQATAGPYGANNMEDSVCCRDYVRYRLPLRVVKKHFTWTSDCPRGVVLLTFR 64
 QY 61 DKEICADPRVPWVKMILNKLQ 82
 DB 65 DKEICADPRVPWVKMILNKLQ 86

RESULT 2
 AAW20058
 ID AAW20058 standard; Protein; 93 AA.

XX AC AAW20058;
 XX
 DT 11-SEP-1997 (first entry)
 XX
 DE Macrophage derived chemokine for treating inflammation.
 XX
 KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
 KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
 KW wound healing; angiogenesis; inflammation.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= sig_peptide
 FT Protein 25..93
 FT /label= mat_protein
 XX
 PN WO9640923-Al.
 XX
 PD 19-DEC-1996.
 XX
 PF 07-JUN-1996; 96WO-US10114.
 XX
 PR 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 XX
 XX (ICOS-) ICOS CORP.
 PA
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the

PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 441; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LVLLAVALQATAGPYGANNMEDSVCCRDYVRYRLPLRVVKKHFTWTSDCPRGVVLLTFR 60
 DB 12 LVLLAVALQATAGPYGANNMEDSVCCRDYVRYRLPLRVVKKHFTWTSDCPRGVVLLTFR 71
 QY 61 DKEICADPRVPWVKMILNKLQ 82
 DB 72 DKEICADPRVPWVKMILNKLQ 93

RESULT 3

AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX
 AC AAW62783;
 XX
 DT 24-SEP-1998 (first entry)
 XX
 DE Amino acid sequence of human STCP-1.
 XX
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX
 OS Homo sapiens.
 XX
 PN WO9824907-Al.
 XX
 PD 11-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US21552.
 XX
 PR 03-DEC-1996; 96US-0760127.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Andrew DP, Chang M;
 XX
 DR WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX
 PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells
 XX
 PS Claim 1; Fig 2A-F; 96pp; English.
 XX
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other

CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmacaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.

XX Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPFGVLLTFR 60
 DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPFGVLLTFR 71
 QY 61 DKEICADPRVPVWKMLNKLQ 82
 DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 4

AAW59433
 ID AAW59433 standard; Protein; 93 AA.

XX
 AC AAW59433;

DT 27-AUG-1998 (first entry)

XX Human chemokine protein 331D5.

DE Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.

XX Homo sapiens.

XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= 331D5
 FT /note= "chemokine protein"

XX WO9811226-A2.

XX 19-MAR-1998.

XX 09-SEP-1997; 97WO-US15315.

XX 10-SEP-1996; 96US-0025724.

XX (SCHE) SCHERING CORP.

XX Gorman DM, Hedrick JA, Zlotnik A;

XX WPI; 1998-207387/18.

XX N-PSDB; AAV34997.

XX Mammalian CC and CXCL chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX Claim 1; Page 78; 82pp; English.

XX This sequence represents a novel human chemokine protein, 331D5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,
 CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment
 CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
 CC regeneration, degeneration or atrophy may be treated by the inventive
 CC compositions.

XX Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPFGVLLTFR 60
 DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPFGVLLTFR 71
 QY 61 DKEICADPRVPVWKMLNKLQ 82
 DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 5

AAW40811
 ID AAW40811 standard; Protein; 93 AA.

XX
 AC AAW40811;

DT 01-APR-1998 (first entry)

XX Macrophage-derived chemokine.

DE Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.

XX Homo sapiens.

XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /note= "leader peptide"
 FT Protein 25..93
 FT /note= "mature protein"

XX US5688927-A.

XX 18-NOV-1997.

XX 07-JUN-1995; 95US-0480449.

XX 07-JUN-1995; 95US-0480449.

XX (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI; 1998-008038/01.

XX N-PSDB; AAT99233.

XX Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting
 CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
 |||||

Qy 61 DKEICADPRVPVWKMLNKLQ 82
 Db 72 DKEICADPRVPVWKMLNKLQ 93
 |||||

RESULT 6
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 AC AAY26175;
 XX
 DT 29-SEP-1999 (first entry)
 XX
 DE Human macrophage derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /note= "signal peptide"
 FT Protein 25..93
 FT /note= "mature macrophage-derived chemokine"
 XX
 PN WO9929728-A1.
 XX
 PD 17-JUN-1999.
 XX
 PF 11-DEC-1998; 98WO-US26291.
 XX
 PR 11-DEC-1997; 97US-0069281.
 XX
 PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A;
 XX
 DR WPI; 1999-385578/32.
 DR N-PSDB; AAX80630.
 XX
 PT Methods of enhancing vaccine efficacy
 XX
 PS Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 XX
 CC The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used
 CC to treat microbial diseases especially HIV.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
 |||||

Qy 61 DKEICADPRVPVWKMLNKLQ 82
 Db 72 DKEICADPRVPVWKMLNKLQ 93
 |||||

RESULT 7
 AAY24414
 ID AAY24414 standard; Protein; 93 AA.
 XX
 AC AAY24414;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Human macrophage derived chemokine.
 XX
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= MDC
 XX
 PN US5932703-A.
 XX
 PD 03-AUG-1999.
 XX
 PF 07-JUN-1996; 96US-0660542.
 XX
 PR 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1999-443621/37.
 DR N-PSDB; AAX90162.
 XX
 PT Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX
 PS Claim 2; Column 41-43; 43pp; English.
 XX
 CC The present invention describes macrophage derived chemokine (MDC)
 CC analogues which are capable of inhibiting MDC induced chemotaxis.
 CC Therefore, the MDC analogues may be used to modulate inflammatory and
 CC immune responses allowing for the treatment of disorders associated
 CC with excessive inflammation or overactive immune responses. Inflammatory
 CC disorders which may be treated in this way include Crohn's disease
 CC (manifested by chronic inflammation of the bowel), atherosclerosis,
 CC arthritis and pulmonary fibrosis. The present sequence represents human
 CC MDC.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
 |||||

QY 61 DKEICADPRVPWKMLNKLQ 82
 |||||
 Db 72 DKEICADPRVPWKMLNKLQ 93

RESULT 8

AAV05871
 ID AAY05871 standard; Protein; 93 AA.

XX AC AAY05871;

XX DT 02-AUG-1999 (first entry)

XX Human macrophage-derived C-C chemokine MDC.

DE MDC; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "signal peptide"
 FT /note= "mature protein"

XX PN WO9915666-A2.

XX PD 01-APR-1999.

XX PF 28-SEP-1998; 98WO-US20270.

XX PR 28-APR-1998; 98US-0067447.

XX PR 26-SEP-1997; 97US-0939107.

XX PA (ICOS-) ICOS CORP.

XX PI Chantray DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX DR WPI; 1999-254715/21.

XX DR N-PSDB; AAX58316.

XX PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists

XX PS Example 1; Page 124; 147pp; English.

XX The present sequence represents a novel human C-C chemokine,
 CC designated macrophage derived chemokine (MDC) that binds to the
 CC CCR4 chemokine receptor. The invention provides vertebrate MDC
 CC polypeptides (see also AAY05876, AAY05877 and AAY05880) and isolated
 CC polynucleotides encoding them, vectors and host cells, and methods
 CC for the recombinant or synthetic production of MDC. Also provided
 CC are MDC analogues, antibodies and antagonists. The MDC antagonists
 CC are used for the preparation of medicaments for the suppression of
 CC the proliferation of a mammalian immunodeficiency virus, for
 CC inhibiting platelet aggregation in a mammal, for the treatment or
 CC palliation of lupus erythematosus in a mammal, for inhibiting
 CC MDC-induced activation, chemotaxis or proliferation of cells that
 CC express CCR4, for inhibiting or palliating an allergic reaction in
 CC a mammal, and for treating asthma (all claimed). MDC polypeptides
 CC are also used in claimed vaccine compositions.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 60
 |||||

Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 71
 QY 61 DKEICADPRVPWKMLNKLQ 82
 |||||
 Db 72 DKEICADPRVPWKMLNKLQ 93

RESULT 9

AAV06829

ID AAY06829 standard; Protein; 93 AA.

XX AC AAY06829;

XX DT 25-JUN-1999 (first entry)

XX Macrophage derived chemokine (MDC) encoding DNA.

DE Macrophage derived chemokine; MDC; lentivirus infection; human; HIV;
 KW human immunodeficiency virus; feline immunodeficiency virus;
 KW bovine immunodeficiency virus.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 27..45
 FT Protein /note= "N-terminal fragment specifically claimed
 FT for in claim 18"
 FT Peptide 26..45
 FT /note= "N-terminal fragment specifically claimed
 FT for in claim 19"

XX PN WO9914237-A1.

XX PD 25-MAR-1999.

XX PF 16-SEP-1998; 98WO-US19450.

XX PR 16-SEP-1997; 97US-0931764.

XX PA (ALKU) AKZO NOBEL NV.

XX PI Devico AL, Gallo RC, Garzino-Demo A, Markham PD;
 XX Pal R;

XX DR WPI; 1999-244024/20.

XX DR N-PSDB; AAX32817.

XX PT Treatment or prevention of lentivirus, particularly HIV infection

XX PS Claim 16; Page 97-98; 103pp; English.

XX This represents a human macrophage derived chemokine (MDC). The
 CC invention provides a novel method of treating or preventing lentivirus
 CC (LV) infection or replication in a human subject, that comprises
 CC administering to the subject a composition comprising MDC or a derivative
 CC of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The
 CC products can be used for treating or preventing LV infection or
 CC replication, particularly HIV infection or replication. The products can
 CC also be used for the prognosis for a LV infection, particularly an HIV
 CC infection using the MDC as a prognostic indicator. The methods can also
 CC be used with other LVs, e.g. simian immunodeficiency virus, feline
 CC immunodeficiency virus and bovine immunodeficiency virus.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 60
 |||||
 Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 71

Qy 61 DKEICADPRVPVWKMLNKLQSQ 82
Db 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 10

AAB07500
ID AAB07500 standard; Protein; 93 AA.

XX AC AAB07500;

XX DT 20-OCT-2000 (first entry)

XX DE A human monokine derived chemokine.

XX KW Systemic memory T cell; CCR4; TARC; integrin dependent arrest;

XX KW Thymus and activation-regulated chemokine; vascular receptor;

XX KW MDC; monokine derived chemokine; adhesion trigger; inflammation.

XX OS Homo sapiens.

XX PN WO200041724-A1.

XX PD 20-JUL-2000.

XX PF 14-JAN-2000; 2000WO-US00953.

XX PR 15-JAN-1999; 99US-0232878.

XX PA (STRD) UNIV LELAND STANFORD JUNIOR.

XX PA (LEUK-) LEUKOSITE INC.

XX PI Butcher EC, Campbell JJ, Wu L, Rottman JB;

XX WPI: 2000-475957/41.

XX DR N-PSDB; AAA58874.

XX PT Modulating the trafficking of systemic memory T cells in mammals by

XX PT administering a CCR4 modulating agent, useful for the treatment of

XX PT inflammation

XX PS Disclosure; Page 38; 39pp; English.

XX CC The specification describes a method of modulating the trafficking of

XX CC systemic memory T cells in a mammalian host. The method comprises

XX CC administering a CCR4 modulating agent. It has been found that systemic

XX CC T cells such as express high levels of CCR4. Ligands of CCR4 such as

XX CC TARC (thymus and activation-regulated chemokine) and MDC (monokine

XX CC derived chemokine) act as an adhesion trigger and, upon CCR4 binding,

XX CC these cells undergo integrin dependent arrest to the appropriate

XX CC vascular receptors. This arrest acts to localize the cells at the

XX CC target site. The method modulates this triggering and CCR4 mediated

XX CC chemotaxis to affect the localization of T cells in targeted tissues.

XX CC The active agent may be a CCR4 agonist that acts to enhance T cell

XX CC localization. Alternatively, it may be an antagonist that blocks CCR4

XX CC biological activity. A CCR4 antagonist may be administered for the

XX CC treatment of inflammation. The present sequence represents a human MDC.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 21; Length 93;

Best Local Similarity 100.0%; Pred. No. 1.4e-47;

Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 60

Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 71

Qy 61 DKEICADPRVPVWKMLNKLQSQ 82

Db 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 11

AAO14046

ID AAO14046 standard; Protein; 93 AA.

XX AC AAO14046;

XX DT 08-MAY-2002 (first entry)

XX DE Human macrophage-derived C-C chemokine (MDC).

XX KW Human; macrophage-derived C-C chemokine; MDC; immune system;

XX KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;

XX KW infection; inflammation; macrophage; Crohn's disease;

XX KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;

XX KW chemotherapy; radiation therapy; tumour.

XX OS Homo sapiens.

XX Key Location/Qualifiers

XX FH Peptide 1..24

XX FT Protein 25..93

XX FT /note= "Signal peptide"

XX FT /note= "Mature macrophage-derived C-C chemokine, this is

XX FT a specifically claimed region"

XX FT Misc-difference 25..39

XX FT /note= "Specifically claimed region"

XX PN US6320023-B1.

XX PD 20-NOV-2001.

XX PF 07-JUN-1995; 95US-0479603.

XX PR 07-JUN-1995; 95US-0479603.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX WPI: 2002-074410/10.

XX DR N-PSDB; AAK98372.

XX PT Macrophage derived C-C chemokines useful in medical imaging and for the

XX PT development of agents for controlling inflammation

XX PS Claim 1; Fig 1; 22pp; English.

XX CC The present sequence represents a novel human macrophage-derived C-C

XX CC chemokine (MDC) of the invention. Chemokines comprise a family of small

XX CC secreted proteins which attract and activate leukocytes, thereby aiding

XX CC in the stimulation and regulation of the immune system. C-C cytokines are

XX CC a subfamily known to activate monocytes, causing calcium flux and

XX CC chemotaxis. The invention comprises a novel human MDC protein and nucleic

XX CC acids, as well as methods for the production of the MDC protein. The MDC

XX CC of the invention is useful in medical imaging (e.g. for imaging sites of

XX CC infection, inflammation, and other sites having C-C chemokine receptor

XX CC molecules. Inhibition of MDC is believed to be useful in treating

XX CC diseases involving macrophages (e.g. Crohn's disease, rheumatoid

XX CC arthritis or atherosclerosis). Alternatively, augmenting the effects of

XX CC MDC is believed to be beneficial towards wound healing and angiogenesis.

XX CC Also MDC or MDC agonists may be beneficial to patients receiving

XX CC chemotherapy or radiation therapy and in the treatment of tumours.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 23; Length 93;

Best Local Similarity 100.0%; Pred. No. 1.4e-47;

Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 60

Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVLLTFR 71

Qy 61 DKEICADPRVPWVKMILNLSQ 82
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 12

AAW07604
 ID AAW07604 standard; Protein; 93 AA.

XX AC AAW07604;

XX DT 03-SEP-1997 (first entry)

XX DE Cytokine beta-13 stimulates migration/activation of immune cells.

XX KW Chemokine beta-13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 KW defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 KW T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 KW Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 KW leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 KW rheumatoid arthritis; silicosis.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT Misc-difference 45

FT FT /note= "given as encoded by CAC codon in AAT44026"

XX PN W09639521-AL.

XX PD 12-DEC-1996.

XX PF 06-JUN-1995; 95WO-US07294.

XX PR 06-JUN-1995; 95WO-US07294.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX PA (SMIK) SMITHKLINE BEECHAM CORP.

XX PI Li H, Seibel G;

XX WPI; 1997-043143/04.

XX DR N-PSDB; AAT44026.

XX PT Human chemokine beta-13 - useful for treating solid tumours,
 PT leukaemia, infections, autoimmune disease, fibrotic disorders,
 PT psoriasis, etc.

XX PS Claim 10; Page 46; 58pp; English.

XX CC AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 CC C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 CC treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 CC stimulates the invasion and activation of host defence cells making it
 CC useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 CC enhancing resistance to acute and chronic infections, e.g. mycobacterial
 CC infections. The chemokine induces chemotactic migration of monocytes,
 CC neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 CC sites where they are needed. Eosinophils may be attracted to the site
 CC of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 CC recruits debris-clearing and connective tissue promoting inflammatory
 CC cells, and is therefore used to stimulate wound healing, prevent
 CC scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 CC fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 CC mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and
 CC to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 CC chemokine which is useful for treating certain autoimmune diseases,
 CC atherosclerosis, chronic inflammatory and infective diseases, allergic
 CC reactions, rheumatoid arthritis, silicosis and bone marrow failure.

XX SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 18; Length 93;

Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVKKHFYWTSDSCRPGVVLTER 60
 Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVKKHFYWTSDSCRPGVVLTER 71

Qy 61 DKEICADPRVPWVKMILNLSQ 82

Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 13

AAW57881

ID AAW57881 standard; Protein; 93 AA.

XX AC AAW57881;

XX DT 23-SEP-1998 (first entry)

XX DE Human chemokine beta-13.

XX KW Chemokine beta-13; human; Ckbeta-13; immune system-related disorder;
 KW tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 KW autoimmune disease; bone marrow stem cell colony formation inhibitor;
 KW haematopoiesis regulator; therapy.

XX OS Homo sapiens.

XX PN W09824908-AL.

XX PD 11-JUN-1998.

XX PF 05-DEC-1997; 97WO-US23144.

XX PR 05-DEC-1996; 96US-0032432.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX PI Li H, Seibel G;

XX WPI; 1998-333327/29.

XX DR N-PSDB; AAV40786.

XX PT Human chemokine beta-13 polypeptide - useful in diagnosis and
 PT treatment of immune-system related disorders e.g. cancer of the
 PT immune system, leukaemias, autoimmune diseases etc.

XX PS Claim 18; Fig 1; 86pp; English.

XX CC This sequence is the human chemokine beta-13 (Ckbeta-13) of the
 CC invention. The polypeptide and nucleic acid are useful in diagnosis
 CC and treatment of immune system-related disorders in mammals (preferably
 CC humans). Such disorders include tumours, cancers, interstitial lung
 CC disease and dysregulation of immune cell function including leukaemias,
 CC lymphomas, autoimmune diseases etc. For example, certain tissues in
 CC mammals with cancer of the immune system express enhanced/decreased
 CC levels of Ckbeta-13 and mRNA encoding Ckbeta-13, and diagnosis can be
 CC achieved by assaying Ckbeta-13 gene expression and comparing to
 CC standard levels. The polypeptides can be administered therapeutically in
 CC pharmaceutical compositions e.g. to treat immune system-related disorders
 CC as above, treat sepsis, inhibit bone marrow stem cell colony formation
 CC during cancer therapy, regulate haematopoiesis, stimulate wound healing
 CC etc. Compositions comprising the polynucleotides may also be
 CC administered, especially to express Ckbeta-13 polypeptide in hosts to
 CC treat dysfunctions associated with aberrant endogenous Ckbeta-13.
 CC activity. The polynucleotides are also useful for mapping of
 CC chromosomes/chromosome sites. The polypeptides are useful to screen for
 CC agonists and antagonists of Ckbeta-13 activity. The antibodies are
 CC useful diagnostically or therapeutically e.g. as antagonists to treat
 CC subjects requiring Ckbeta-13 reduction.

XX SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 19; Length 93;
 Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
 |||||
 DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
 |||||

QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 DB 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 14
 AAB68352
 ID AAB68352 standard; Protein; 93 AA.
 XX
 AC AAB68352;
 XX
 DT 09-JUL-2001 (first entry)
 XX
 DE Amino acid sequence of human chemokine beta-13 polypeptide.
 XX
 KW Chemokine beta-13; Addison's disease; haemolytic anaemia;
 KW rheumatic arthritis; dermatitis; allergic encephalomyelitis;
 KW glomerulonephritis; Goodpasture's Syndrome; Grave's Disease;
 KW multiple sclerosis; allergic reaction; asthma; anaphylaxis;
 KW hypersensitivity; blood group incompatibility; organ rejection;
 KW graft vs host disease; inflammatory disorder; septic shock;
 KW infectious diseases; immune system relative disorder; leukemia;
 KW wound healing; inflammatory bowel disease; cancer; psoriasis;
 KW hypervascular disease; hyperproliferative disorder; atherosclerosis;
 KW bone marrow failure; inflammation.
 XX
 OS Homo sapiens.
 XX
 PN WO200132128-A2.
 XX
 PD 10-MAY-2001.
 XX
 PF 02-NOV-2000; 2000WO-US30237.
 XX
 PR 03-NOV-1999; 99US-0432768.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (BGHM) BRIGHAM & WOMENS HOSPITAL INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 XX

Ulrich S, Selbel G, Li H, Lusinskas FW;
 WPI; 2001-316379/33.
 N-PSDB; AAF85169.
 XX
 PT Novel human chemokine beta-13 polypeptides useful for treating
 PT autoimmune diseases, inflammatory diseases, infectious diseases,
 PT allergic conditions, hypervascular diseases, tumors and for wound
 PT healing
 XX
 PS Claim 18; Fig 1; 220pp; English.
 XX
 CC The present sequence represents a human chemokine beta-13 (CKbeta-13).
 CC CKbeta-13 polypeptides and polynucleotides are useful for treating
 CC deficiencies or disorders of immune systems, haematopoietic cells,
 CC autoimmune disorders such as Addison's disease, haemolytic anaemia,
 CC rheumatic arthritis, dermatitis, allergic encephalomyelitis,
 CC glomerulonephritis, Goodpasture's Syndrome, Grave's Disease and multiple
 CC sclerosis, allergic reactions such as asthma, anaphylaxis,
 CC hypersensitivity, blood group incompatibility, organ rejection, graft
 CC vs host disease, inflammatory disorders including septic shock, sepsis
 CC or systemic inflammatory response syndrome, infectious diseases, immune
 CC system relative disorders including leukemia, wound healing, acute and
 CC chronic infection and inflammatory bowel disease, cancers, psoriasis,

CC hypervascular diseases, hyperproliferative disorders, atherosclerosis
 CC and bone marrow failure. They are also useful for modulating haemostatic
 CC or thrombolytic activity, for diagnosing infectious agents, modulate
 CC inflammation, inhibit bone marrow stem cells, colony formation, inhibit
 CC proliferation and differentiation of haematopoietic cells, inhibit
 CC epidermal keratinocyte proliferation, as anti-neovascularisation agent,
 CC enhance host defences, inhibit T-cell proliferation, prevent scarring
 CC during wound healing, increasing eosinophils, mobilize bone marrow stem
 CC cells, inhibit cell growth and inhibit chemotaxis and activation of
 CC macrophages.
 XX
 SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 22; Length 93;
 Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
 |||||
 DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
 |||||

QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 DB 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 15
 AAY05879
 ID AAY05879 standard; Protein; 93 AA.
 XX
 AC AAY05879;
 XX
 DT 02-AUG-1999 (first entry)
 XX
 DE Human macrophage-derived C-C chemokine MDC analogue.
 XX
 KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 26 /note= "not Pro"
 FT
 XX
 PN WO9915666-A2.
 XX
 PD 01-APR-1999.
 XX
 PF 28-SEP-1998; 98WO-US20270.
 XX
 PR 28-APR-1998; 98US-0067447.
 PR 26-SEP-1997; 97US-0939107.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 WPI; 1999-254715/21.
 DR
 XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 PT
 XX Disclosure; Page 144; 147pp; English.
 PS
 XX The present sequence represents a synthetic analogue of the novel
 CC human macrophage derived C-C chemokine MDC (see also AAY05871). The
 CC analogue has an amino acid substitution at residue 2 of the mature
 CC polypeptide. MDC analogues (see also AAY05872-75) are expected to be
 CC antagonists of MDC, inhibiting activity by competitively binding to

CC the receptor that recognises MDC or forming inactive heterodimers
CC with MDC. MDC antagonists are used in claimed methods for the
CC preparation of medicaments for the suppression of the proliferation
CC of a mammalian immunodeficiency virus, for inhibiting platelet
CC aggregation in a mammal, for the treatment or palliation of lupus
CC erythematosus in a mammal, for inhibiting MDC-induced activation,
CC chemotaxis or proliferation of cells that express CCR4, for
CC inhibiting or palliating an allergic reaction in a mammal, and for
CC treating asthma.
XX
SQ Sequence 93 AA;
Query Match 98.0%; Score 432; DB 20; Length 93;
Best Local Similarity 98.8%; Pred. No. 1.8e-46;
Matches 81; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFFYWTSDSCPRPGVLLTFR 60
Db ||||||||||| ||||||||||| ||||||||||| ||||||||||| ||||||||||| |||||||||||
12 LVLLAVALQATEAGXYGANNEDSVCCRDYVRYRLPLRVVKHFFYWTSDSCPRPGVLLTFR 71
QY 61 DKEICADPRVPVVKMIILKLSQ 82
Db ||||||||||| ||||||||||| ||||||||||| ||||||||||| ||||||||||| |||||||||||
72 DKEICADPRVPVVKMIILKLSQ 93

Search completed: July 28, 2003, 04:04:46
Job time : 18.916 secs


```
Db 72 DKEICADPRVPVWKMLNLSQ 93
|||||
RESULT 2
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660.542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-660-542-2
Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 71
|||||
Qy 61 DKEICADPRVPVWKMLNLSQ 82
|||||
Db 72 DKEICADPRVPVWKMLNLSQ 93
|||||
RESULT 4
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479.603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-603-2
Query Match 100.0%; Score 441; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 71
|||||
Qy 61 DKEICADPRVPVWKMLNLSQ 82
|||||
Db 72 DKEICADPRVPVWKMLNLSQ 93
|||||
RESULT 3
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
```

Db 12 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 71
QY 61 DKEICADPRVPVVKMLNLSQ 82
Db 72 DKEICADPRVPVVKMLNLSQ 93

RESULT 5

PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 100.0%; Score 441; DB 5; Length 93;
Best Local Similarity 100.0%; Pred No. 8,1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 60
Db 12 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 71
QY 61 DKEICADPRVPVVKMLNLSQ 82
Db 72 DKEICADPRVPVVKMLNLSQ 93

RESULT 6

US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker, Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature

```
; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,"
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE: misc_feature
; NAME/KEY:
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-08-660-542-25
Query Match 90.0%; Score 397; DB 2; Length 93;
Best Local Similarity 92.7%; Pred. No. 4e-44; Indels 0; Gaps 0;
Matches 76; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
Qy 61 DKEICADPRVPVWKMLNKLQ 82
Db 72 DXICADPRVPVXXKMLNKLQ 93
RESULT 7
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660.542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
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; MOLECULE TYPE: peptide
; US-08-660-542-30
Query Match 87.5%; Score 386; DB 2; Length 70;
Best Local Similarity 100.0%; Pred. No. 7.5e-43; Indels 0; Gaps 0;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 14 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 73
Db 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
Qy 74 KMLNKLQ 82
Db 62 KMLNKLQ 70
RESULT 8
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660.542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31
Query Match 84.8%; Score 374; DB 2; Length 69;
Best Local Similarity 97.1%; Pred. No. 2.6e-41;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 14 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 73
Db 1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVP 60
```

Qy 74 KWLKLSQ 82
| | | | |
Db 61 KWLKLSQ 69

RESULT 9

US-08-660-542-32

; Sequence 32, Application US/08660542

; Patent No. 5932703

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; APPLICANT: Gray, Patrick W.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

; TITLE OF INVENTION: ANALOGS

; NUMBER OF SEQUENCES: 32

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

; STREET: 6300 Sears Tower, 233 South Wacker Drive

; CITY: Chicago

; STATE: Illinois

; COUNTRY: United States of America

; ZIP: 60606-6402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/660,542

; FILING DATE:

; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/558,658

; FILING DATE: 16-NOV-1995

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/479,620

; FILING DATE: 07-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Gass, David A.

; REGISTRATION NUMBER: 38,153

; REFERENCE/DOCKET NUMBER: 27866/33318

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 312/474-6300

; TELEFAX: 312/474-0448

; TELEX: 25-3856

; INFORMATION FOR SEQ ID NO: 32:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 69 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; US-08-660-542-32

Query Match 82.1%; Score 362; DB 2; Length 69;

Best Local Similarity 94.2%; Pred. No. 9.5e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 14 GPGYGNMDSVCCRDYVRYRLPLRVVHKHYWTSDSCPRPGVLLTFRDKETCADPRVPWV 73

| | | | |

Db 1 GPGYGNMDSVCCRDYVRYRLPLRVVHKHYWTSDSCPRPGVLLTFRDKETCADPRVPWV 60

Qy 74 KWLKLSQ 82

| | | | |

Db 61 KWLKLSQ 69

RESULT 10

US-09-230-637-26

; Sequence 26, Application US/09230637

; Patent No. 6264958

; GENERAL INFORMATION:

; APPLICANT: Hayward, Gary

```
;
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; US-08-208-339A-4

Query Match      34.2%; Score 151; DB 1; Length 89;
Best Local Similarity 35.0%; Pred. No. 2.7e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;

QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
   |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Db 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWQIPORFIVDYSETSPQCPRPGVLLTKR 65
   ::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

QY 61 DKEICADPRVPWVKMILNKL 80
   ::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Db 66 GROICADPNKKWQKVISDL 85

RESULT 12
US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.
; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-722-719-6

Query Match      34.2%; Score 151; DB 3; Length 89;
Best Local Similarity 35.0%; Pred. No. 2.7e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;

QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
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Db 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWQIPORFIVDYSETSPQCPRPGVLLTKR 65
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QY 61 DKEICADPRVPWVKMILNKL 80
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Db 66 GROICADPNKKWQKVISDL 85

RESULT 13
US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: Polynucleotides and Polypeptides (As Amended)
; CURRENT APPLICATION NUMBER: US/09/334,951
; CURRENT FILING DATE: 1999-06-17
; EARLIER APPLICATION NUMBER: US 08/208,339
; EARLIER FILING DATE: 1994-03-08
; EARLIER APPLICATION NUMBER: US 08/446,881
; EARLIER FILING DATE: 1995-05-05
; EARLIER APPLICATION NUMBER: US 08/465,682
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/722,719
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-334-951-6

Query Match      33.8%; Score 149; DB 4; Length 89;
Best Local Similarity 35.0%; Pred. No. 4.9e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;

QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
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Db 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWQIPORFIVDYSETSPQCPRPGVLLTKR 65
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QY 61 DKEICADPRVPWVKMILNKL 80
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Db 66 GROICADPNKKWQKVISDL 85

RESULT 14
US-09-230-637-40
; Sequence 40, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary
; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
; TITLE OF INVENTION: Associated Herpesvirus
; FILE REFERENCE: 1107.78372
; CURRENT APPLICATION NUMBER: US/09/230,637
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GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 11.1975 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165a-2_COPY_12_93
Perfect score: 441
Sequence: 1 LVLLAVALQATEAGPYGANM.....ETICADPRVPVWKMLNKLQ 82

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 451899 seqs, 118759770 residues
Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*

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2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US05_NEW_PUB.pep:*

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11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2:*

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13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	441	100.0	93	10	US-09-837-446-6
2	441	100.0	93	11	US-09-811-088-2
3	441	100.0	93	15	US-10-314-410-2
4	436	98.9	93	10	US-09-908-599-2
5	436	98.9	93	10	US-09-908-600-2
6	268	60.8	68	15	US-10-001-221A-3
7	214.5	48.6	67	15	US-10-001-221A-7
8	213	48.3	37	10	US-09-864-761-43730
9	153	34.7	71	10	US-09-144-838-3
10	152	34.5	78	15	US-10-001-221A-6
11	151	34.2	89	10	US-09-334-923A-6
12	151	34.2	89	10	US-09-334-954A-6
13	151	34.2	97	10	US-09-925-302-792
14	147.5	33.4	91	8	US-08-927-939-21
15	147.5	33.4	91	10	US-09-144-838-9
16	147.5	33.4	91	10	US-09-834-795A-29

17	147.5	33.4	91	12	US-09-834-794A-29
18	147.5	33.4	91	12	US-09-920-137A-8
19	147.5	33.4	91	12	US-09-537-858-1
20	147.5	33.4	91	15	US-10-158-386-5
21	147.5	33.4	91	15	US-10-057-275-8
22	147.5	33.4	91	15	US-10-293-705-12
23	147.5	33.4	78	15	US-10-158-366-6
24	145	32.9	69	11	US-09-792-793A-28
25	144	32.7	73	10	US-09-144-838-6
26	144	32.7	89	10	US-09-834-795A-34
27	144	32.7	89	12	US-09-834-794A-34
28	143	32.4	70	10	US-09-334-923A-65
29	143	32.4	70	10	US-09-334-954A-65
30	139	31.5	87	15	US-10-153-064-86
31	138.5	31.4	92	15	US-10-114-482-3
32	135	30.6	93	8	US-08-927-939-48
33	135	30.6	93	10	US-09-334-923A-2
34	135	30.6	93	10	US-09-834-795A-30
35	135	30.6	93	10	US-09-334-954A-2
36	135	30.6	93	12	US-09-834-794A-30
37	135	30.6	93	12	US-09-372-348-5
38	135	30.6	93	12	US-09-372-348-6
39	135	30.6	93	12	US-09-372-348-7
40	135	30.6	93	15	US-10-153-064-2
41	135	30.6	93	15	US-10-293-705-6
42	135	30.6	143	12	US-09-372-348-4
43	134	30.4	72	10	US-09-144-838-5
44	131.5	29.8	92	8	US-08-927-939-20
45	131.5	29.8	92	10	US-09-834-795A-31

ALIGNMENTS

RESULT 1

US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 100.0%; Score 441; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.4e-46;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYRVRLPLRVVYKHFWYWTSDSCPRGVLLTFR 60
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DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYRVRLPLRVVYKHFWYWTSDSCPRGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNKLQ 82
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DB 72 DREICADPRVPVWKMLNKLQ 93
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RESULT 2
US-09-811-088-2

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16

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STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match      98.9%; Score 436; DB 10; Length 93;
Best Local Similarity 98.8%; Pred. No. 9.6e-46;
Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFR 60
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QY 61 DREICADPRVPVVKMLNLSQ 82
DB 72 DREICADPRVPVVKMLNLSQ 93

RESULT 6
US-10-001-221A-3
; Sequence 3, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 68
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match      60.8%; Score 268; DB 15; Length 68;
Best Local Similarity 64.7%; Pred. No. 2.1e-25;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;

QY 14 GPGANVEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVW 73
DB 1 GPGANVEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVW 60
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QY 74 KMILNKLS 81
DB 61 KXLLHKLS 68

RESULT 7
US-10-001-221A-7
; Sequence 7, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; CURRENT FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match      48.6%; Score 214.5; DB 15; Length 67;
Best Local Similarity 58.5%; Pred. No. 6.8e-19;
Matches 38; Conservative 13; Mismatches 9; Indels 5; Gaps 1;

QY 22 DSV-----CCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVVKMI 76
DB 3 DSVSIPITCCQDIIRPLPSRLVKEFFWTSKCRKPGVLLITVKNRDICADPRQVWVKKL 62

QY 77 LNKLS 81
DB 63 LHKLS 67

RESULT 8
US-09-864-761-43730
; Sequence 43730, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
; FILE REFERENCE: Aecomica-x-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
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;; PRIOR APPLICATION NUMBER: PCT/US01/00665
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00668
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00663
;; PRIOR FILING DATE: 2001-01-30
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;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00661
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00670
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: US 60/234,687
;; PRIOR FILING DATE: 2000-09-21
;; PRIOR APPLICATION NUMBER: US 09/608,408
;; PRIOR FILING DATE: 2000-06-30
;; PRIOR APPLICATION NUMBER: US 09/774,203
;; PRIOR FILING DATE: 2001-01-29
;; NUMBER OF SEQ ID NOS: 49117
;; SOFTWARE: Annonax Sequence Listing Engine vers. 1.1
;; SEQ ID NO 43730
;; LENGTH: 37
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; OTHER INFORMATION: MAP TO AC004382.1
;; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
;; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
;; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
;; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
;; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EST_HUMAN HIT: W61220.1, EVALUE 8.50e-01
;; OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUE 3.00e-18
US-09-864-761-43730

Query Match 48.3%; Score 213; DB 10; Length 37;
Best Local Similarity 100.0%; Pred. No. 5.4e-19;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 18 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGV 54
Db 1 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGV 37

RESULT 9
US-09-144-838-3
;; Sequence 3, Application US/09144838A
;; Patent No. US20020051996A1
;; GENERAL INFORMATION:
;; APPLICANT: Siani, Michael A.
;; APPLICANT: Wilken, Jill
;; APPLICANT: Simon, Reyna
;; APPLICANT: Kent, Stephen B.H.
;; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
;; FILE REFERENCE: GRFN-020/0105
;; CURRENT APPLICATION NUMBER: US/09/144,838A
;; CURRENT FILING DATE: 1998-08-31
;; EARLIER APPLICATION NUMBER: US 60/057,620
;; EARLIER FILING DATE: 1997-09-04
;; NUMBER OF SEQ ID NOS: 54
;; SOFTWARE: PatentIn ver. 2.1
;; SEQ ID NO 3
;; LENGTH: 71
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 34.7%; Score 153; DB 10; Length 71;
Best Local Similarity 42.9%; Pred. No. 2.3e-11;
Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

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Db 12 CCYGFQHPPPVQILKWEYPTSPACPRGVLLTKRGQICADPSKKNVRLMORL 67
RESULT 10
US-10-001-221A-6
;; Sequence 6, Application US/10001221A
;; Publication No. US20030108515A1
;; GENERAL INFORMATION:
;; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
;; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
;; FILE REFERENCE: 10709/14
;; CURRENT APPLICATION NUMBER: US/10/001,221A
;; CURRENT FILING DATE: 2001-10-30
;; PRIOR APPLICATION NUMBER: 09/834,814
;; PRIOR FILING DATE: 2001-04-20
;; NUMBER OF SEQ ID NOS: 7
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 6
;; LENGTH: 78
;; TYPE: PRT
;; ORGANISM: Artificial sequence
;; FEATURE:
;; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 34.5%; Score 152; DB 15; Length 78;
Best Local Similarity 40.8%; Pred. No. 3.3e-11;
Matches 29; Conservative 16; Mismatches 24; Indels 2; Gaps 2;
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Db 1 GPYCANVEDSICCFNVNRKPIQRLESYTRITNIQCPKEAVIFKKTORGVEYCADPKR 60
Oy 72 WVKMLNKLKLSQ 82
Db 61 WVRDSMKHLQ 71

RESULT 11
US-09-334-923A-6
;; Sequence 6, Application US/09334923A
;; Patent No. US20020061551A1
;; GENERAL INFORMATION:
;; APPLICANT: Ruben, Steven M.
;; APPLICANT: Li, Haodong
;; TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As A
;; FILE REFERENCE: 1488.033000D
;; CURRENT APPLICATION NUMBER: US/09/334,923A
;; CURRENT FILING DATE: 1999-06-17
;; PRIOR APPLICATION NUMBER: US 08/208,339
;; PRIOR FILING DATE: 1994-03-08
;; PRIOR APPLICATION NUMBER: US 08/446,881
;; PRIOR FILING DATE: 1995-05-05
;; PRIOR APPLICATION NUMBER: US 08/465,682
;; PRIOR FILING DATE: 1995-06-06
;; PRIOR APPLICATION NUMBER: US 08/468,775
;; PRIOR FILING DATE: 1995-06-06
;; PRIOR APPLICATION NUMBER: US 08/722,719
;; PRIOR FILING DATE: 1996-09-30
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn ver. 2.0
;; SEQ ID NO 6
;; LENGTH: 89
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-334-923A-6

Query Match 34.2%; Score 151; DB 10; Length 89;
Best Local Similarity 35.0%; Pred. No. 5.1e-11;

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 94.0588 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-2_COPY12_93
Perfect score: 441
Sequence: 1 LVLLAVALQATEAGPYGANM.....ETCADRPVWVKMLNKLQ 82

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Main.*

- 1: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep.*
- 2: /cgn2_6/ptodata/1/paa/US06_COMB.pep.*
- 3: /cgn2_6/ptodata/1/paa/US07_COMB.pep.*
- 4: /cgn2_6/ptodata/1/paa/US08_COMB.pep.*
- 5: /cgn2_6/ptodata/1/paa/US081_COMB.pep.*
- 6: /cgn2_6/ptodata/1/paa/US082_COMB.pep.*
- 7: /cgn2_6/ptodata/1/paa/US083_COMB.pep.*
- 8: /cgn2_6/ptodata/1/paa/US084_COMB.pep.*
- 9: /cgn2_6/ptodata/1/paa/US085_COMB.pep.*
- 10: /cgn2_6/ptodata/1/paa/US086_COMB.pep.*
- 11: /cgn2_6/ptodata/1/paa/US087_COMB.pep.*
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- 24: /cgn2_6/ptodata/1/paa/US100_COMB.pep.*
- 25: /cgn2_6/ptodata/1/paa/US101_COMB.pep.*
- 26: /cgn2_6/ptodata/1/paa/US102_COMB.pep.*
- 27: /cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	441	100.0	86	13	US-08-925-857-10
2	441	100.0	93	1	PCT-US00-00953-6
3	441	100.0	93	8	US-08-464-594-2
4	441	100.0	93	8	US-08-479-620-2
5	441	100.0	93	9	US-08-558-658-2
6	441	100.0	93	11	US-08-760-127-3
					Sequence 10, Appl
					Sequence 6, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 3, Appl

7	441	100.0	93	12	US-08-820-364-2	Sequence 2, Appl
8	441	100.0	93	13	US-08-925-857-12	Sequence 12, Appl
9	441	100.0	93	13	US-08-931-764-2	Sequence 2, Appl
10	441	100.0	93	13	US-08-931-764B-2	Sequence 2, Appl
11	441	100.0	93	13	US-08-939-107-2	Sequence 2, Appl
12	441	100.0	93	14	US-09-067-447-2	Sequence 2, Appl
13	441	100.0	93	14	US-09-067-447B-2	Sequence 2, Appl
14	441	100.0	93	14	US-09-067-447B-2	Sequence 2, Appl
15	441	100.0	93	19	US-09-509-165A-2	Sequence 2, Appl
16	441	100.0	93	19	US-09-591-992-2	Sequence 2, Appl
17	441	100.0	93	21	US-09-712-726-2	Sequence 2, Appl
18	441	100.0	93	21	US-09-791-537-22726	Sequence 22726, A
19	441	100.0	93	22	US-09-811-088-2	Sequence 2, Appl
20	441	100.0	93	22	US-09-837-446-6	Sequence 6, Appl
21	441	100.0	100	21	US-09-760-476-2007	Sequence 2007, Ap
22	441	100.0	100	21	US-09-760-481-204	Sequence 204, App
23	441	100.0	100	26	US-10-216-245-2007	Sequence 207, Ap
24	441	100.0	100	26	US-10-216-388-204	Sequence 204, App
25	441	100.0	100	26	US-10-217-651-449	Sequence 449, App
26	436	98.9	93	1	PCT-US00-30237-2	Sequence 2, Appl
27	436	98.9	93	13	US-08-986-188-2	Sequence 2, Appl
28	436	98.9	93	18	US-09-432-768-2	Sequence 2, Appl
29	436	98.9	93	18	US-09-484-221-2	Sequence 2, Appl
30	436	98.9	93	23	US-09-908-599-2	Sequence 2, Appl
31	436	98.9	93	23	US-09-908-600-2	Sequence 2, Appl
32	436	98.9	93	25	US-10-137-438-2	Sequence 2, Appl
33	436	98.9	93	27	US-60-032-432-2	Sequence 2, Appl
34	432	98.0	93	14	US-09-067-447-41	Sequence 41, Appl
35	432	98.0	93	14	US-09-067-447-41	Sequence 41, Appl
36	432	98.0	93	19	US-09-509-165A-41	Sequence 41, Appl
37	430	97.5	93	19	US-09-509-165A-46	Sequence 46, Appl
38	397	90.0	93	9	US-08-558-658-25	Sequence 25, Appl
39	397	90.0	93	13	US-08-939-107-25	Sequence 25, Appl
40	397	90.0	93	14	US-09-067-447-25	Sequence 25, Appl
41	397	90.0	93	14	US-09-067-447-25	Sequence 25, Appl
42	397	90.0	93	14	US-09-067-447B-25	Sequence 25, Appl
43	397	90.0	93	19	US-09-509-165A-25	Sequence 25, Appl
44	386	87.5	69	27	US-60-412-866-1	Sequence 1, Appl
45	386	87.5	70	13	US-08-939-107-30	Sequence 30, Appl

ALIGNMENTS

RESULT 1
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESS: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/925,857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:

```
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-925-857-10

Query Match 100.0%; Score 441; DB 13; Length 86;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 60
Db 5 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 64
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 65 DKEICADPRVPWVKMILKLSQ 86

RESULT 2
PCT-US00-00953-6
; Sequence 6, Application PC/TUS00000953
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
; TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: PCT/US00/00953
; CURRENT FILING DATE: 2000-01-14
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US00-00953-6

Query Match 100.0%; Score 441; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 71
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 72 DKEICADPRVPWVKMILKLSQ 93

RESULT 3
US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
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; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 100.0%; Score 441; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFR 71
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 72 DKEICADPRVPWVKMILKLSQ 93

RESULT 4
US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELECOMMUNICATION INFORMATION:
```


TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-620-2

Query Match 100.0%; Score 441; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
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DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNLSQ 82
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DB 72 DREICADPRVPVWKMLNLSQ 93
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RESULT 5
US-08-558-658-2
; Sequence 2, Application US/08558658
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/558,658
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33009
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-558-658-2

Query Match 100.0%; Score 441; DB 9; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNLSQ 82
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DB 72 DREICADPRVPVWKMLNLSQ 93
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RESULT 6
US-08-760-127-3
; Sequence 3, Application US/08760127
; GENERAL INFORMATION:
; APPLICANT: Chang, Ming-shi
; APPLICANT: Andrew, David P.
; TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Amgen Inc.
; STREET: 1840 De Havilland Drive
; CITY: Thousand Oaks
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 91320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/760,127
; FILING DATE: 03-DEC-1996
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Whiteford, Wendy A.
; REGISTRATION NUMBER: 36,964
; REFERENCE/DOCKET NUMBER: A-429
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (805) 447-1008
; TELEFAX: (805) 447-1090
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-760-127-3

Query Match 100.0%; Score 441; DB 11; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||

DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNLSQ 82
|||||

DB 72 DREICADPRVPVWKMLNLSQ 93
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RESULT 7
US-08-820-364-2
; Sequence 2, Application US/08820364
; GENERAL INFORMATION:
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA

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; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; FILING DATE: 12-MAR-1997
; APPLICATION NUMBER: 536
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCE/DOCKET NUMBER: 07334/023001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-820-364-2

Query Match 100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 8
US-08-820-364-2
; Sequence 12, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925,857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090

; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; FILING DATE: 12-MAR-1997
; APPLICATION NUMBER: 536
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCE/DOCKET NUMBER: 07334/023001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-820-364-2

Query Match 100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 9
US-08-931-764-2
; Sequence 2, Application US/08931764
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
; TITLE OF INVENTION: AS AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036/2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/931,764
; FILING DATE: To be assigned
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Mistrock, S. Leslie
; REGISTRATION NUMBER: 18,872
; REFERENCE/DOCKET NUMBER: 8769-029
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-931-764-2

Query Match 100.0%; Score 441; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY:
LOCATION:
OTHER INFORMATION: /note = "human MDC"
US-09-067-447-2

Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 13
US-09-067-447-2
Sequence 2, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/939,107
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER FILING DATE: 1996-06-07
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/479,620
EARLIER FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 2
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens - human MDC
US-09-067-447-2

Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 14
US-09-067-447B-2
Sequence 2, Application US/09067447B
GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
APPLICANT: Chantry, David H.
APPLICANT: Deeley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MD
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447B
FILING DATE:

CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY:
LOCATION:
OTHER INFORMATION: /note = "human MDC"
US-09-067-447B-2

Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 15

US-09-509-165A-2
; Sequence 2, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; FILE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-509-165A-2

Query Match 100.0%; Score 441; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTER 60
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTER 71
Qy 61 DKEICADPRVPWVKMILNKLQ 82
Db 72 DKEICADPRVPWVKMILNKLQ 93

Search completed: July 28, 2003, 04:14:53
Job time : 94.0588 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 28.9412 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93
Perfect score: 441
Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPWVKMILNLSQ 82

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues
Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending Patents_AA_New:*
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14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	441	100.0	93	2	PCT-US02-35606-109
2	441	100.0	93	2	PCT-US02-35606-146
3	441	100.0	93	2	PCT-US02-40891-473
4	441	100.0	93	2	PCT-US02-40891-549
5	441	100.0	93	2	PCT-US02-40891-638
6	441	100.0	93	2	PCT-US02-40891-639
7	441	100.0	93	2	PCT-US02-40891-640
8	441	100.0	93	2	PCT-US02-40891-641
9	441	100.0	93	12	US-10-314-410-2
10	441	100.0	93	12	US-10-405-027-5105
11	441	100.0	93	12	US-10-445-790-2
12	441	100.0	93	14	US-60-453-135-8659
13	441	100.0	93	14	US-60-453-050-8659
14	441	100.0	93	14	US-60-455-444-4765
15	441	100.0	93	14	US-60-455-241-4765
16	441	100.0	93	14	US-60-466-412-8659
17	436	98.9	93	12	US-10-285-572-2
18	436	98.9	93	12	US-10-137-438A-2
19	436	98.9	93	12	US-10-406-494-2

20	386	87.5	69	12	US-10-341-931-2	Sequence 2, Appl1
21	386	87.5	172	12	US-10-335-394-49	Sequence 49, Appl
22	386	87.5	334	12	US-10-335-394-53	Sequence 53, Appl
23	386	87.5	587	12	US-10-335-394-50	Sequence 50, Appl
24	386	87.5	678	2	PCT-US02-40891-333	Sequence 333, App
25	386	87.5	677	2	PCT-US02-40891-422	Sequence 422, App
26	380	86.2	678	2	PCT-US02-40891-424	Sequence 424, App
27	373	84.6	676	2	PCT-US02-40891-424	Sequence 424, App
28	373	84.6	677	2	PCT-US02-40891-423	Sequence 423, App
29	366	83.0	676	2	PCT-US02-40891-425	Sequence 425, App
30	268	60.8	68	10	US-09-839-445-3	Sequence 3, Appl1
31	268	60.8	68	12	US-10-001-221A-3	Sequence 3, Appl1
32	214.5	48.6	67	10	US-09-839-445-7	Sequence 7, Appl1
33	214.5	48.6	67	12	US-10-001-221A-7	Sequence 7, Appl1
34	162.5	36.8	77	10	US-09-839-445-6	Sequence 6, Appl1
35	153	34.7	691	2	PCT-US02-40891-345	Sequence 345, App
36	153	34.7	698	2	PCT-US02-40891-330	Sequence 330, Appl
37	152	34.5	78	12	US-10-001-221A-6	Sequence 6, Appl1
38	151	34.2	89	2	PCT-US02-40891-546	Sequence 546, App
39	151	34.2	89	2	PCT-US02-40891-561	Sequence 561, App
40	151	34.2	89	2	PCT-US02-40891-562	Sequence 562, App
41	151	34.2	89	2	PCT-US02-40891-564	Sequence 564, App
42	151	34.2	89	2	PCT-US02-40891-565	Sequence 565, App
43	151	34.2	89	2	PCT-US02-40891-566	Sequence 566, App
44	151	34.2	89	2	PCT-US02-40891-567	Sequence 567, App
45	151	34.2	89	12	US-10-165-233A-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match	100.0%	Score	441;	DB	2;	Length	93;
Best Local Similarity	100.0%	Pred. No.	1.9e-47;				
Matches	82;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
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Db	12	LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVKHFYWTSDSCPRPGVLLTFR	71				
Qy	61	DKEICADPRVPWVKMILNLSQ	82				
Db	72	DKEICADPRVPWVKMILNLSQ	93				

RESULT 2
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046

;; PRIOR FILING DATE: 2001-11-07
;; NUMBER OF SEQ ID NOS: 160
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 146
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWKMLNKLQ 82
|||||
Db 72 DKEICADPRVPVWKMLNKLQ 93
|||||

RESULT 3
PCT-US02-40891-473

;; Sequence 473, Application PC/TUS0240891
;; GENERAL INFORMATION:
;; APPLICANT: Human Genome Sciences, Inc.
;; TITLE OF INVENTION: Albumin Fusion Proteins
;; FILE REFERENCE: PF564PCT

;; CURRENT APPLICATION NUMBER: PCT/US02/40891

;; CURRENT FILING DATE: 2002-12-23

;; PRIOR APPLICATION NUMBER: 60/341,811

;; PRIOR FILING DATE: 2001-12-21

;; PRIOR APPLICATION NUMBER: 60/360,000

;; PRIOR FILING DATE: 2002-02-28

;; PRIOR APPLICATION NUMBER: 60/378,950

;; PRIOR FILING DATE: 2002-05-10

;; PRIOR APPLICATION NUMBER: 60/398,008

;; PRIOR FILING DATE: 2002-07-24

;; PRIOR APPLICATION NUMBER: 60/411,355

;; PRIOR FILING DATE: 2002-09-18

;; PRIOR APPLICATION NUMBER: 60/414,984

;; PRIOR FILING DATE: 2002-10-02

;; PRIOR APPLICATION NUMBER: 60/417,611

;; PRIOR FILING DATE: 2002-10-11

;; PRIOR APPLICATION NUMBER: 60/420,246

;; PRIOR FILING DATE: 2002-10-23

;; PRIOR APPLICATION NUMBER: 60/423,623

;; PRIOR FILING DATE: 2002-11-05

;; PRIOR APPLICATION NUMBER: 60/351,360

;; PRIOR FILING DATE: 2002-01-28

;; Remaining Prior Application data removed - See File Wrapper or PALM.

;; SOFTWARE: PatentIn Ver. 2.0

;; NUMBER OF SEQ ID NOS: 222

;; SEQ ID NO 473

;; LENGTH: 93

;; TYPE: PRT

;; ORGANISM: Homo sapiens

PCT-US02-40891-473

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWKMLNKLQ 82
|||||
Db 72 DKEICADPRVPVWKMLNKLQ 93
|||||

RESULT 4

PCT-US02-40891-549

;; Sequence 549, Application PC/TUS0240891

;; GENERAL INFORMATION:

;; APPLICANT: Human Genome Sciences, Inc.

;; TITLE OF INVENTION: Albumin Fusion Proteins

;; FILE REFERENCE: PF564PCT

;; CURRENT APPLICATION NUMBER: PCT/US02/40891

;; CURRENT FILING DATE: 2002-12-23

;; PRIOR APPLICATION NUMBER: 60/341,811

;; PRIOR FILING DATE: 2001-12-21

;; PRIOR APPLICATION NUMBER: 60/360,000

;; PRIOR FILING DATE: 2002-02-28

;; PRIOR APPLICATION NUMBER: 60/378,950

;; PRIOR FILING DATE: 2002-05-10

;; PRIOR APPLICATION NUMBER: 60/398,008

;; PRIOR FILING DATE: 2002-07-24

;; PRIOR APPLICATION NUMBER: 60/411,355

;; PRIOR FILING DATE: 2002-09-18

;; PRIOR APPLICATION NUMBER: 60/414,984

;; PRIOR FILING DATE: 2002-10-02

;; PRIOR APPLICATION NUMBER: 60/417,611

;; PRIOR FILING DATE: 2002-10-11

;; PRIOR APPLICATION NUMBER: 60/420,246

;; PRIOR FILING DATE: 2002-10-23

;; PRIOR APPLICATION NUMBER: 60/423,623

;; PRIOR FILING DATE: 2002-11-05

;; PRIOR APPLICATION NUMBER: 60/351,360

;; PRIOR FILING DATE: 2002-01-28

;; Remaining Prior Application data removed - See File Wrapper or PALM.

;; SOFTWARE: PatentIn Ver. 2.0

;; NUMBER OF SEQ ID NOS: 222

;; SEQ ID NO 549

;; LENGTH: 93

;; TYPE: PRT

;; ORGANISM: Homo sapiens

PCT-US02-40891-549

Query Match 100.0%; Score 441; DB 2; Length 93;

Best Local Similarity 100.0%; Pred. No. 1.9e-47;

Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWKMLNKLQ 82
|||||

Db 72 DKEICADPRVPVWKMLNKLQ 93
|||||

RESULT 5

PCT-US02-40891-638

;; Sequence 638, Application PC/TUS0240891

;; GENERAL INFORMATION:

;; APPLICANT: Human Genome Sciences, Inc.

;; TITLE OF INVENTION: Albumin Fusion Proteins

;; FILE REFERENCE: PF564PCT

;; CURRENT APPLICATION NUMBER: PCT/US02/40891

;; CURRENT FILING DATE: 2002-12-23

;; PRIOR APPLICATION NUMBER: 60/341,811

;; PRIOR FILING DATE: 2001-12-21

;; PRIOR APPLICATION NUMBER: 60/360,000

;; PRIOR FILING DATE: 2002-02-28

;; PRIOR APPLICATION NUMBER: 60/378,950

;; PRIOR FILING DATE: 2002-05-10

;; PRIOR APPLICATION NUMBER: 60/398,008

;; PRIOR FILING DATE: 2002-07-24

;; PRIOR APPLICATION NUMBER: 60/411,355

;; PRIOR FILING DATE: 2002-09-18

;; PRIOR APPLICATION NUMBER: 60/414,984

;; PRIOR FILING DATE: 2002-10-02

;; PRIOR APPLICATION NUMBER: 60/417,611


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; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match      100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DKEICADPRVPVWKMLNKLQ 82
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Db 72 DKEICADPRVPVWKMLNKLQ 93
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RESULT 6
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-09-18
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match      100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DKEICADPRVPVWKMLNKLQ 82
   |||||||
Db 72 DKEICADPRVPVWKMLNKLQ 93
   |||||||
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Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
QY 61 DKEICADPRVPVWKMLNKLQ 82
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Db 72 DKEICADPRVPVWKMLNKLQ 93
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RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match      100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
   |||||||
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
   |||||||

QY 61 DKEICADPRVPVWKMLNKLQ 82
   |||||||
Db 72 DKEICADPRVPVWKMLNKLQ 93
   |||||||

RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
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; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

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Query Match	100.0%;	Score 441;	DB 2;	Length 93;
Best Local Similarity	100.0%;	Pred. NO. 1.9e-47;		
Matches 82; Conservative	0;	Mismatches 0;	Indels 0;	Gaps 0;

QY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
Db	LVLLAVLQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60

Qy	61	DKEICADPRVPVVKMILNKL	SQ	82
Db	72	DKEICADPRVPVVKMILNKL	SQ	93

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RESULT 9
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Fan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USSS
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

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Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. NO. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy	1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTTF 60
Db	12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTTF 71

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RESULT 10
US-10-405-027-5105
Sequence 5105, Application US/10405027
GENERAL INFORMATION:
APPLICANT: Rosen et al.
FILE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806P1
CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIORITY APPLICATION NUMBER: 60/369,608
PRIOR FILING DATE: 2002-04-04
PRIOR APPLICATION NUMBER: 60/376,175
PRIOR FILING DATE: 2002-04-30
NUMBER OF SEQ ID NOS: 5810
SOFTWARE: Patentin ver. 2.0
SEQ ID NO 5105
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
US-10-405-027-5105

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Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82: Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy	1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVLLTTFR 60
Db	12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVLLTTFR 71

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RESULT 11
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

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Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
    |
RESULT 12
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-60-453-135-8659

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
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RESULT 13
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-60-453-050-8659

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
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RESULT 14
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-60-455-444-4765

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
    |
RESULT 15
US-60-465-241-4765
; Sequence 4765, Application US/60465241
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001468
; CURRENT APPLICATION NUMBER: US/60/465,241
; CURRENT FILING DATE: 2003-04-23
; NUMBER OF SEQ ID NOS: 258418
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-60-465-241-4765

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCRPGVVLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
    |
Search completed: July 28, 2003, 04:18:49
Job time : 28.9412 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:01:18 ; Search time 8.09664 Seconds

(without alignments)
973.617 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVWKMLNKLKLSQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR_73:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	147.5	33.4	91	1 A28815	monocyte chemoattr
2	142	32.2	92	2 I52322	macrophage inflam
3	139.5	31.6	91	1 A46339	monocyte chemoattr
4	132	29.9	92	2 A32393	macrophage inflam
5	131.5	29.8	92	1 A31767	macrophage inflam
6	130	29.5	99	2 JC5295	monocyte chemoattr
7	129	29.3	92	2 A30574	macrophage inflam
8	128	29.0	92	2 C30552	macrophage inflam
9	124	28.1	93	2 B35673	LD78-beta protein
10	121	27.4	120	2 I48147	monocyte chemoattr
11	119.5	27.1	109	2 A54678	monocyte chemoattr
12	113	25.6	99	1 A39296	monocyte chemoattr
13	113	25.6	99	2 JC2336	monocyte chemoattr
14	111	25.2	99	2 A60299	monocyte chemoattr
15	110	24.9	148	1 S07723	immediate-early se
16	109	24.7	99	2 JC2417	monocyte chemoattr
17	108.5	24.6	92	2 I46730	immune activation
18	108.5	24.6	97	2 JC4912	ectoxin precursor
19	102.5	23.2	148	1 A30209	PDGF-inducible JE
20	97	22.0	50	2 C60407	monocyte adherence
21	96.5	21.9	120	2 JE0177	lymphocyte and mon
22	96	21.8	99	2 JC2136	monocyte chemoattr
23	95.5	21.7	116	2 I49555	gene C10 protein -
24	93.5	21.2	125	2 I46857	monocyte chemoattr
25	93	21.1	96	2 I48099	ectoxin precursor
26	92	20.9	96	2 JC2478	ectoxin precursor
27	90.5	20.5	114	1 ETHUL	lymphotactin precu
28	87	19.7	96	2 A37236	I-309 protein prec
29	84.5	19.2	92	2 S24236	TCA3 protein - mou

monocytic cytokine
lymphotactin precu
monocyte chemotact
neutrophil-activat
cytokine SDF-1-bet
platelet factor 4
transformation-ind
RSV-induced protei
pre-B-cell growth-
interleukin-8 homo
cytokine - mouse
C-X-C chemokine LI
platelet basic pro
alveolar macrophag
interleukin-8 - do
carboxy-terminal p

30 82.5 18.7 97 2 A48093
31 76 17.2 114 1 ETMSL
32 74.5 16.9 72 2 A55984
33 74.5 16.9 114 2 A55010
34 73 16.6 93 2 G01540
35 73 16.6 105 2 A26774
36 72 16.3 103 2 A26736
37 72 16.3 103 2 I50417
38 69 15.6 89 2 A53497
39 69 15.6 89 2 I53416
40 69 15.6 93 2 I81182
41 69 15.6 132 2 A57325
42 68 15.4 119 2 S42881
43 67 15.2 117 2 B44253
44 66 15.0 95 2 JN0841
45 66 15.0 539 2 JH0263

ALIGNMENTS

RESULT 1

A28815

monocyte chemoattractant cytokine RANTES precursor - human

N;Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
C;Species: Homo sapiens (man)

C;Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998

C;Accession: A28815

R;Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M.; J. Immunol. 141, 1018-1025, 1988

A;Title: A human T cell-specific molecule is a member of a new gene family.

A;Reference number: A28815; MUID:88285659; PMID:2456327

A;Accession: A28815

A;Molecule type: mRNA

A;Residues: 1-91 <SCH>

A;Cross-references: GB:M21121

C;Comment: The acronym RANTES reflects the description "Regulated upon Activation, NO C;Genetics:

A;Gene: GDB:SCV45; D17S136E

A;Cross-references: GDB:120749; OMIM:187011

A;Map position: 17q11.2-17q12

C;Superfamily: macrophage inflammatory protein

C;Keywords: chemotaxis; cytokine; immediate-early protein; Inflammation; T-cell

F;1-23/Domain: signal sequence #status predicted <SIG>

F;24-91/Product: T-cell protein RANTES #status predicted <MAT>

Query Match 33.4%; Score 147.5; DB 1; Length 91;
Best Local Similarity 34.6%; Pred. No. 1.6e-10;
Matches 28; Conservative 20; Mismatches 30; Indels 3; Gaps 2;

QY 1 LVLLAVALQA-TEAGPYGANNEDSVCCRDVVRVRLPLRVVKKHFYVTSDCSPRGVLLTF 59

Db 10 VLIATCALCAPASPYSS--DTTPCCFAIARPLPRAHKEYFYTSKGKSNPAVVFVTR 67

QY 60 RDKEICADPRVPVWKMLNKL 80

Db 68 KNRQVCANPEKKWREYINSL 88

RESULT 2

I52322

macrophage inflammatory protein-1alpha - rat

C;Species: Rattus norvegicus (Norway rat)

C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 16-Jul-1999

C;Accession: I52322

R;Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.

Biochem. Biophys. Res. Commun. 211, 289-295, 1995

A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat

A;Reference number: I52322; MUID:95298037; PMID:7779098

A;Accession: I52322

A;Status: preliminary; translated from GB/EMBL/DBDJ

A;Molecule type: mRNA

A;Residues: 1-92 <RES>

A:Cross-references: EMBL:U022414; NID:g790632; PIDN:AAA80608.1; PID:g790633
C:Superfamily: macrophage inflammatory protein

Query Match 32.2%; Score 142; DB 2; Length 92;
Best Local Similarity 38.2%; Pred. No. 7.4e-10;
Matches 26; Conservative 18; Mismatches 22; Indels 2; Gaps 2;

QY 13 AGPYGANNEDSVCCRDYVRYRLPLRVKHFVWTSQPRGVLTLFRDKKEICADPRVFW 72
DB 23 SAPYCAD-TPIACCFSYGR-QIPKRFIADYFETSSQPGVIFLTKNRQICADPKETW 80
QY 73 VKMIINLKL 80
DB 81 VOEYITEL 88

RESULT 3

A46539
N:Alternate names: MuRantes
C:Species: Mus musculus (house mouse)
C:Date: 18-Jun-1993 #sequence revision 16-Aug-1996 #text_change 22-Jun-1999
C:Accession: I48875; A46539; I48654; I56970
R:Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A:Title: Cloning, genomic organization, and chromosomal localization of the scya5 gene
A:Reference number: I48875; MUID:94132613; PMID:7507961
A:Accession: I48875
A:Status: Preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <DAN>
A:Cross-references: EMBL:U02298; NID:g460090; PIDN:AAA18302.1; PID:g460091
R:Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural and
A:Reference number: A46539; MUID:92289805; PMID:1376260
A:Accession: A46539
A:Molecule type: mRNA
A:Residues: 1-18, 'A', '20-91 <SCH>
A:Cross-references: GB:S37648; NID:g250207; PIDN:AAB22330.1; PID:g250208
A:Experimental source: macrophage cell line PUS-1.8
A:Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
Mol. Cell. Biol. 14, 2914-2925, 1994
A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region
A:Reference number: I48654; MUID:94217689; PMID:7513046
A:Accession: I48654
A:Status: translation not shown; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <SHI>
A:Cross-references: EMBL:X70675; NID:g475205; PIDN:CAA50011.1; PID:g475206
R:Neilson, E.G.; Krensky, A.
Kidney Int. 41, 220-225, 1992
A:Title: Isolation and characterization of cDNA from renal tubular epithelium encoding m
A:Reference number: I56970; MUID:92277990; PMID:1375672
A:Accession: I56970
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-40, 'E', '42-91 <NEI>
A:Cross-references: GB:M77747; NID:g200649; PIDN:AAA40029.1; PID:g200650
C:Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
C:Genetics:
A:Introns: 26/1; 63/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: Chemotaxis; cytokine; immediate-early protein; inflammation
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-91/Product: monocyte chemoattractant cytokine RANTES #status predicted <MAT>

Query Match 31.6%; Score 139.5; DB 1; Length 91;
Best Local Similarity 35.8%; Pred. No. 1.5e-09;
Matches 29; Conservative 17; Mismatches 32; Indels 3; Gaps 2;

QY 1 LVLLAVAL-QATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFVWTSQPRGVLTLTF 59

DB 10 ILTAAALCTPAPASPYGS--DTTPCCFAYLISLALPRAHVKEYFYFTSSKCSNLAVVVFVTR 67
QY 60 RDKEICADPRVPWVKMILNKL 80
DB 68 RNQVCANPERKKWQOEYINYL 88

RESULT 4

A23293
macrophage inflammatory protein-1-alpha precursor - mouse
N:Alternate names: heparin-binding chemotaxis protein; L2G35B protein; SCI/MIP-1a;
C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence revision 17-Jul-1992 #text_change 16-Jul-1999
C:Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
R:Grover, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A:Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflamm-t
A:Reference number: S11685; MUID:91016858; PMID:2216738
A:Accession: S11685
A:Molecule type: DNA
A:Residues: 1-92 <GRO>
A:Cross-references: EMBL:X53372; NID:g54062; PIDN:CAA37452.1; PID:g297531
R:Kwon, B.S.; Weiseman, S.M.
Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A:Title: cDNA sequence of two inducible T-cell genes.
A:Reference number: A32393; MUID:89184547; PMID:2784565
A:Accession: A32393
A:Molecule type: mRNA
A:Residues: 1-92 <KWO>
A:Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Gallegos, J.
J. Exp. Med. 167, 1939-1944, 1988
A:Title: Cloning and characterization of a cDNA for murine macrophage inflammatory r
A:Reference number: S04533; MUID:88258380; PMID:3290382
A:Accession: S04533
A:Molecule type: mRNA
A:Residues: 1-48, 'E', '50-90, 'I', '92 <DA2>
A:Cross-references: EMBL:X12531
A:Note: the authors translated the codon CAG for residue 49 as Asp and ATT for res
A:Note: the sequence has been corrected in reference A53885
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, J.
J. Exp. Med. 170, 2189, 1989
A:Reference number: A53885
A:Contents: erratum
A:Accession: A53885
A:Molecule type: mRNA
A:Residues: 1-92 <DAV>
A:Cross-references: EMBL:X12531; NID:g53122; PIDN:CAA31047.1; PID:g53123
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A:Title: A family of small inducible proteins secreted by leukocytes are members o
s of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: A30552
A:Molecule type: mRNA
A:Residues: 1-21, 'L', '23-61, 'A', '63-92 <BRO>
A:Cross-references: GB:M23447; NID:g533240; PIDN:AAA40146.1; PID:g533241
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.
J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, an c
A:Reference number: JLO088; MUID:89067830; PMID:3058856
A:Accession: PS0303
A:Molecule type: mRNA
A:Residues: 24-33, 'XX', '36-54 <SHE>
R:Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; ol
J. Exp. Med. 167, 570-581, 1988
A:Title: Macrophages secrete a novel heparin-binding protein with inflammatory and
A:Reference number: A27596; MUID:88154745; PMID:3279154
A:Accession: A27596
A:Molecule type: protein
A:Residues: 24-33, 'XX', '36-42 <WOL>

A>Note: 26-Met, 30-Pro, and 39-Thr were also found
 R;Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
 J. Immunol. 146, 4031-4040, 1991
 A>Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
 A;Reference number: 156104; MUID:91237116; PMID:2033269
 A;Accession: 156104
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 1-92 <RES>
 A;Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
 C;Comment: This protein is a monokine.
 C;Genetics:
 A;Introns: 23/3; 26/1; 63/2
 C;Superfamily: macrophage inflammatory protein
 C;Keywords: heparin binding
 F;1-23/Domain: signal sequence #status predicted <SIG>
 F;24-92/Product: macrophage inflammatory protein status experimental <MAT>
 Query Match 29.94; Score 132; DB 2; Length 92;
 Best Local Similarity 36.8%; Pred. No. 1.2e-08;
 Matches 25; Conservative 17; Mismatches 24; Indels 2; Gaps 2;
 QY 13 AGPYGANNEDSVCCRDYVRLPLRVVKKHFWYTSDCPRGCVLLTFRDKEICADPRVPW 72
 DB 23 SAPYGD-TPTACCFYSR-KIPRQFIVDYFETSSLCSPQGVIFLTRNRQICADSKETW 80
 QY 73 VKMLNKL 80
 DB 81 VQXYITDL 88
 RESULT 5
 A31767
 macrophage inflammatory protein 1-beta precursor [validated] - human
 N;Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene
 protein 2 (Act-2); T-cell activation protein gamma
 C;Species: Homo sapiens (man)
 C;Date: 07-Jun-1990 #sequence.revision 29-May-1998 #text.change 15-Sep-2000
 C;Accession: JH0319; A40978; A37411; B30574; B45817; D30552
 R;Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequig
 Mol. Immunol. 27, 1091-1102, 1990
 A>Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
 A;Reference number: JH0319; MUID:91061800; PMID:2247088
 A;Accession: JH0319
 A;Status: translation not shown
 A;Molecule type: DNA
 A;Residues: 1-92 <BA>
 A;Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
 A;Experimental source: natural killer cell, strain CD3-CD2+, F5, 5IIE5
 R;Napolitano, M.; Modi, W.S.; Cevalario, S.J.; Gnarr, J.R.; Seuanez, H.N.; Leonard, W.J.
 J. Biol. Chem. 266, 17531-17536, 1991
 A>Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsive
 A;Reference number: A40978; MUID:91373378; PMID:1894635
 A;Accession: A40978
 A;Molecule type: DNA
 A;Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
 A;Cross-references: GB:M69201; NID:g178021
 A;Note: 15-Ala was also found
 R;Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
 Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
 A>Title: Identification, cloning, and characterization of an immune activation gene.
 A;Reference number: A31767; MUID:89071764; PMID:2462251
 A;Accession: A31767
 A;Molecule type: mRNA
 A;Residues: 1-92 <LIP>
 A;Cross-references: GB:J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
 R;Chang, H.C.; Reinherz, E.L.
 Eur. J. Immunol. 19, 1045-1051, 1989
 A>Title: Isolation and characterization of a cDNA encoding a putative cytokine which is
 A;Reference number: A37411; MUID:89325421; PMID:2568930
 A;Accession: A37411
 A;Molecule type: mRNA
 A;Residues: 1-92 <CHA>

A;Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
 R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
 J. Immunol. 142, 1582-1590, 1989
 A>Title: Mitogenic activation of human T cells induces two closely related genes which
 A;Reference number: A30574; MUID:89140347; PMID:2521882
 A;Accession: B30574
 A;Molecule type: mRNA
 A;Residues: 1-19, 'L', 21-92 <ZIP>
 A;Cross-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
 R;Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
 J. Immunol. 143, 2907-2916, 1989
 A>Title: A novel polypeptide secreted by activated human T lymphocytes.
 A;Reference number: A45817; MUID:90038522; PMID:2809212
 A;Accession: B45817
 A;Molecule type: mRNA
 A;Residues: 7-55, 'I', 57-79, 'T', 81-92 <MIL>
 A;Cross-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
 R;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
 J. Immunol. 142, 679-687, 1989
 A>Title: A family of small inducible proteins secreted by leukocytes are members of a
 s of various activation processes.
 A;Reference number: A30552; MUID:89093958; PMID:2521353
 A;Accession: D30552
 A;Molecule type: mRNA
 A;Residues: 1-39, 'REASS', 46-92 <BRO>
 A;Cross-references: GB:M23502; NID:g533212; PIDN:AAA36656.1; PID:g533213
 R;Clare, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
 submitted to the Brookhaven Protein Data Bank, January 1994
 A;Reference number: A52206; PDB:1HUM
 A;Contents: annotation; conformation and disulfide bond assignments by (1)H-NMR, res
 C;Comment: This protein is secreted by activated lymphocytes and monocytes. It is bou
 C;Genetics:
 A;Gene: GDB:LAG1
 A;Cross-references: GDB:127451; OMIM:153335
 A;Map position: 17q21-17q21
 A;Introns: 26/1; 64/2
 C;Superfamily: macrophage inflammatory protein
 C;Keywords: chemotaxis; cytokine; inflammation
 F;1-23/Domain: signal sequence #status predicted <SIG>
 F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F;34-58,35-74/Disulfide bonds: #status experimental
 Query Match 29.8%; Score 131.5; DB 1; Length 92;
 Best Local Similarity 36.5%; Pred. No. 1.4e-08;
 Matches 27; Conservative 12; Mismatches 34; Indels 1; Gaps 1;
 QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVVKKHFWYTSDCPRGCVLLTFR 60
 DB 11 LMLVAAPFCSPALAPMGSD-PPTACCFSTARKLPNRFVVDYVETSSLCSPQVAVFQTKR 69
 QY 61 DKEICADPRVPWVK 74
 DB 70 SKQVCADPSESQWQ 83
 RESULT 6
 JC5295
 monocyte chemotactic protein-2 precursor - human
 C;Species: Homo sapiens (man)
 C;Date: 02-May-1997 #sequence.revision 18-Jul-1997 #text.change 20-Jun-2000
 C;Accession: JC5295
 R;Van Coillie, E.; Froyen, G.; Nomiya, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van
 Biochem. Biophys. Res. Commun. 231, 726-730, 1997
 A>Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression
 A;Reference number: JC5295; MUID:97224420; PMID:9070881
 A;Accession: JC5295
 A;Molecule type: mRNA
 A;Residues: 1-99 <VAN>
 A;Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938
 A;Experimental source: bone marrow
 C;Comment: This protein belongs to the beta-chemokine family which is one of the major
 tis and in tumor biology, and contribute to the trafficking and recruitment of the res
 C;Genetics:

A:Gene: mcp-2

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>

Query Match 29.5%; Score 130; DB 2; Length 99;

Best Local Similarity 33.7%; Pred. No. 2.2e-08;

Matches 29; Conservative 15; Mismatches 36; Indels 6; Gaps 2;

QY 3 LLAVLAQATEAGPYGANNMDSV----CCRDVVRVRLPL-RVVKHFYWTSDSCPRPGVVL 56

DB 7 LCLLLMAATFSQGLAQPDVSIPITCFNINKPIQRLSRTIRITNIQCPKEAVIF 66

QY 57 LTFRDKEICADPRVPWVKMILNKLQ 82

DB 67 KTORGEVCADPKERWVRDSMKHLQ 92

RESULT 7

A30574

macrophage inflammatory protein 1-alpha precursor - human

N:Alternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced protein

1

C:Species: Homo sapiens (man)

C:Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000

C:Accession: A30574; A30574; A30412; A24198; A30908

R:Nakao, M.; Nomiya, H.; Shimada, K.

Mol. Cell. Biol. 10, 3646-3658, 1990

A:Title: Structures of human genes coding for cytokine LD78 and their expression.

A:Reference number: A35673; MUID:90287155; PMID:1694014

A:Accession: A35673

A:Molecule type: DNA

A:Residues: 1-92 <NAK>

A:CROSS-references: GB:D90144; NID:9219905; PIDN:BAAL14172.1; PID:g219906

R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.

J. Immunol. 142, 1582-1590, 1989

A:Title: Mitogenic activation of human T cells induces two closely related genes which

are

A:Reference number: A30574; MUID:89140347; PMID:2521882

A:Accession: A30574

A:Molecule type: mRNA

A:Residues: 1-92 <ZIP>

A:CROSS-references: GB:M25315; NID:g602452; PIDN:AAA57255.1; PID:g602453

R:Blum, S.; Forsdyke, K.E.; Forsdyke, D.R.

DNA Cell Biol. 9, 589-602, 1990

A:Title: Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation

A:Reference number: A30412; MUID:91103879; PMID:2271120

A:Accession: A30412

A:Molecule type: mRNA

A:Residues: 1-92 <BLU>

A:CROSS-references: GB:M23178; GB:M32337; NID:g182846; PIDN:AAA35858.1; PID:g182847

R:Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.

J. Biochem. 99, 885-894, 1986

A:Title: A cDNA clone used to study mRNA inducible in human tonsillar lymphocytes by a

trans

A:Reference number: A24198; MUID:86223879; PMID:3086300

A:Accession: A24198

A:Molecule type: mRNA

A:Residues: 1-92 <OBA>

A:CROSS-references: GB:X03754; NID:g34298; PIDN:CAA27388.1; PID:g758089

C:Genetics:

A:Gene: GDB:SCYA3

A:CROSS-references: GDB:120368; OMIM:182283

A:Map position: 17q11-17q21

C:Superfamily: macrophage inflammatory protein

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>

F:33-57,34-73/Disulfide bonds: #status predicted

Query Match

Best Local Similarity 29.3%; Score 129; DB 2; Length 92;

Matches 20; Conservative 14; Mismatches 24; Indels 0; Gaps 0;

QY 23 SVCCRDYVRVRLPLRVVKHFYWTSDSCPRPGVVLTFRDKEICADPRVPWVKMILNKL 80

DB 31 TACCFSYTSRQIPQFIADYFETSSQCKPGVIFLTKRSQVCADPSEWQKYVSDL 88

RESULT 8

C30552

macrophage inflammatory protein 1-beta precursor - mouse

N:Alternate names: H400; SIS gamma; T-cell activation protein gamma

C:Species: Mus musculus (house mouse)

C:Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999

C:Accession: C30552; JLO088; PS0304; S22042

R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.

J. Immunol. 142, 679-687, 1989

A:Title: A family of small inducible proteins secreted by leukocytes are members of a

new

A:Reference number: A30552; MUID:89093958; PMID:2521353

A:Accession: C30552

A:Molecule type: mRNA

A:Residues: 1-92 <BRO>

A:CROSS-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245

R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.-

J. Exp. Med. 168, 2251-2259, 1988

A:Title: Resolution of the two components of macrophage inflammatory protein 1, an

antigen

A:Reference number: JLO088; MUID:89067830; PMID:3058856

A:Accession: JLO088

A:Molecule type: mRNA

A:Residues: 1-92 <SHE>

A:CROSS-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697

A:Accession: PS0304

A:Molecule type: protein

A:Residues: 24-33, 'XX', '36', 'X', '38 <SH2>

R:Daubersies, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M.

submitted to the EMBL Data Library, October 1991

A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.

A:Reference number: S22042

A:Accession: S22042

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-92 <DAU>

A:CROSS-references: EMBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127

C:Comment: This protein is a monokine.

C:Genetics:

A:Introns: 26/1; 64/2

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>-

F:76/Binding site: carbohydrate (Asn) #status predicted

Query Match 29.0%; Score 128; DB 2; Length 92;

Best Local Similarity 38.3%; Pred. No. 3.6e-08;

Matches 31; Conservative 12; Mismatches 36; Indels 2; Gaps 2;

QY 1 LVLLAVALQATE-AGPYGANNMDSVCCRDYVRVRLPLRVVKHFYWTSDSCPRPGVVLTF 59

DB 10 LLLLVAAFCAGFSAFGMSDPTTS-CCFSYTSRQLHRSFVMDYETTSLSLCSKPAVVFVLT 68

QY 60 RDKKEICADPRVPWVKMILNKL 80

DB 69 RGRQICANPSEWPVTEYMSDL 89

RESULT 9

B35673

LD78-beta protein precursor - human

N:Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducible

C:Species: Homo sapiens (man)

C:Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000

C:Accession: B35673; B30412; S10157; B30908

R:Nakao, M.; Nomiya, H.; Shimada, K.

Mol. Cell. Biol. 10, 3646-3658, 1990

A:Title: Structures of human genes coding for cytokine LD78 and their expression.

A:Reference number: A35673; MUID:90287155; PMID:1694014

A:Accession: B35673
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-93 <NAK>
 A:Cross-references: GB:D90145; NID:g219907; PIDN:BAAL14173.1; PID:g219908
 R:Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
 DNA Cell Biol. 9, 589-602, 1990
 A:Title: Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation
 A:Reference number: A30412; MUID:91103879; PMID:2271120
 A:Accession: B30412
 A:Status: preliminary; not compared with conceptual translation.
 A:Molecule type: DNA
 A:Residues: 1-93 <BLU>
 A:Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
 R:Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sieber
 Nucleic Acids Res. 18, 3261-3270, 1990
 A:Title: Two inflammatory mediator cytokine genes are closely linked and variably amplified
 A:Reference number: S10157; MUID:90287702; PMID:1972563
 A:Accession: S10157
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-93 <IRV>
 A:Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
 C:Comment: This protein is a member of a "small inducible" or "activation specific" gene
 C:Genetics:
 A:Gene: GDB:SCYA4
 A:Cross-references: GDB:120369; OMIM:182284
 A:Map position: 17q11-17q21
 A:Introns: 26/1; 64/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: cytokine
 F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-93/Product: LD78-beta protein #status predicted <MAT>
 Query Match 28.1%; Score 124; DB 2; Length 93;
 Best Local Similarity 31.2%; Pred. No. 1.1e-07;
 Matches 25; Conservative 17; Mismatches 36; Indels 2; Gaps 2;
 QY 1 LVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFVWTSQCPFGVLLTFR 60
 DB 12 LCTMALCNQVLSA-PLAAD-TTPACCFSTYSRQIPQNFADYFETSSQCSKPSVIFLTR 69
 QY 61 DKEICADPRVPVVKMILNKL 80
 DB 70 GRQVCADPEEWVKYVSDL 89
 RESULT 10
 I48147
 monocytic chemoattractant protein-1 - guinea pig
 C:Species: Cavia porcellus (guinea pig)
 C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
 C:Accession: I48147
 R:Yoshimura, T.
 J. Immunol. 150, 5025-5032, 1993
 A:Title: cDNA cloning of guinea pig monocytic chemoattractant protein-1 and expression of
 A:Reference number: I48147; MUID:93267104; PMID:8496603
 A:Accession: I48147
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-120 <RES>
 A:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
 C:Genetics:
 A:Gene: MCP-1
 C:Superfamily: macrophage inflammatory protein
 Query Match 27.4%; Score 121; DB 2; Length 120;
 Best Local Similarity 36.1%; Pred. No. 3.2e-07;
 Matches 30; Conservative 14; Mismatches 35; Indels 4; Gaps 3;
 QY 1 LVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHF-YWTSQCPFGVLLTFR 59
 DB 11 LVITEATFCSLLMAQPDGVN--TPTCCYTENK-QIPLKRVKGYERTSSRCPEAVIFRTL 67

QY 60 RDEICADPRVPVVKMILNKLQ 82
 DB 68 KNKEVCADPTQKWQDYIAKLQ 90

RESULT 11

A54678

monocyte chemoattractant protein 3 precursor - human

N:Alternate names: monocyte chemoattractant protein MCP-3

C:Species: Homo sapiens (man)

C:Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999

C:Accession: A54678; JCI478; S32222

R:Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys,

Genomics 21, 403-408, 1994

A:Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to

A:Reference number: A54678; MUID:94375065; PMID:7916328

A:Accession: A54678

A:Molecule type: DNA

A:Residues: 1-109 <OPD>

A:Cross-references: GB:X72309

R:Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.

Biochem. Biophys. Res. Commun. 191, 535-542, 1993

A:Title: Human monocyte chemoattractant protein-3 (MCP-3): Molecular cloning of the cDNA

A:Reference number: JCI478; MUID:93213290; PMID:8461011

A:Accession: JCI478

A:Molecule type: mRNA

A:Residues: 1-109 <OP2>

A:Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAA51055.1; PID:g313708

R:Minty, A.; Chalon, P.; Guillemot, J.C.; Kagnad, M.; Liauzun, P.; Magazin, M.; Milou

submitted to the EMBL Data Library, March 1993

A:Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoat

A:Reference number: S32222

A:Accession: S32222

A:Molecule type: mRNA

A:Residues: 1-109 <MIN>

A:Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397

C:Comment: This protein induces proteinase secretion and chemotaxis by macrophages an

C:Genetics:

A:Gene: GDB:SCYA7; SCYA6; MCP-3

A:Cross-references: GDB:138473; OMIM:158106

A:Map position: 17q11-17q12

A:Introns: 36/1; 75/2

C:Superfamily: macrophage inflammatory protein

C:Keywords: cytokine; glycoprotein; inflammation

F:1-33/Domain: signal sequence #status predicted <SIG>

F:34-109/Product: monocyte chemoattractant protein 3 #status predicted <MAT>

F:39/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 27.1%; Score 119.5; DB 2; Length 109;

Best Local Similarity 35.7%; Pred. No. 4.5e-07;

Matches 30; Conservative 12; Mismatches 39; Indels 3; Gaps 3;

QY 1 LVLLAVALQATE-AGPYGANNEDSVCCRDYRVRLP-LRVVVKHFYWTSSCPFGVLLT 58

DB 20 LLITAAAFSPQGLAQPGVIN-TSTTCYCFINKKIPORLESYRRTTSSRCPEAVIFKT 78

QY 59 FRDKEICADPRVPVVKMILNKLQ 82

DB 79 KLDKEICADPTQKWQDFMKHLDK 102

RESULT 12

A3296

monocyte chemoattractant protein 1 precursor - bovine

N:Alternate names: monocyte chemoattractant factor 1; seminal plasma protein P6

C:Species: Bos primigenius taurus (cattle)

C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999

C:Accession: A3296; B3296

R:Wempe, F.; Henschen, A.; Scheit, K.H.

DNA Cell Biol. 10, 671-679, 1991

A:Title: Gene expression and cDNA cloning identified a major basic protein constituent

A:Reference number: A3296; MUID:92096117; PMID:1721821


```

Query Match      24.9%; Score 110; DB 1; Length 148;
Best Local Similarity 29.5%; Pred. No. 8.4e-06;
Matches 26; Conservative 15; Mismatches 41; Indels 6; Gaps 2;

Qy      1  LVLLAVALQTEAGPYGANMEDSV-----CCRDYVRYRRLPL-RVXHFYWTSDSCRPGV 54
      :  || :      :  || :      :  || :      :  || :      :  || :
Db      5  VTLLGLLTVAACSIHVLSPDAPVNAPLTCYCTGCKMIPMSRLNKYKRTTSRCKPEAV 64

Qy      55  VLLTFRDKEICADPRVPVTKMILNKLSQ 82
      |  | :  |||||  || :  ||  |
Db      65  VFVTKLKREICADPNKEWQYKIRKLQD 92

```


GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.30672 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVVKMLNKLQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	441	100.0	93	1 SY22_HUMAN	O00626 homo sapien
2	310	70.3	92	1 SY22_MOUSE	O88430 mus musculu
3	155	35.1	90	1 SY04_CHICK	O90826 gallus gall
4	151	34.2	89	1 SY18_HUMAN	P55774 h small ind
5	147.5	33.4	91	1 SY05_HUMAN	P13501 homo sapien
6	142	32.2	92	1 SY03_RAT	P50229 rattus norv
7	140.5	31.9	92	1 SY05_RAT	P50231 rattus norv
8	140	31.7	104	1 SY12_MOUSE	Q62401 mus musculu
9	139.5	31.6	91	1 SY05_MOUSE	P30882 mus musculu
10	138.5	31.4	92	1 SY04_RAT	P50230 rattus norv
11	135	30.6	93	1 SY14_HUMAN	O16627 homo sapien
12	132.5	30.0	91	1 SY05_BOVIN	O97919 bos taurus
13	132	29.9	92	1 SY03_MOUSE	P10855 mus musculu
14	131.5	29.8	92	1 SY04_HUMAN	P13236 h small ind
15	130	29.5	94	1 VM12_KSHV	O98157 kaposi's sa
16	130	29.5	91	1 SY08_HUMAN	P80075 homo sapien
17	129	29.3	92	1 SY03_HUMAN	P10147 homo sapien
18	128.5	29.1	91	1 SY05_CAVPO	P97272 cavia porce
19	128	29.0	92	1 SY04_MOUSE	P14097 mus musculu
20	125	28.3	113	1 SY15_HUMAN	Q16663 homo sapien
21	124	28.1	93	1 SY3L_HUMAN	P16619 homo sapien
22	122.5	27.8	98	1 SY13_HUMAN	O99616 homo sapien
23	121	27.4	120	1 SY02_CAVPO	O08782 cavia porce
24	119.5	27.1	99	1 SY07_HUMAN	P80098 homo sapien
25	119	27.0	94	1 SY17_HUMAN	Q92583 homo sapien
26	118.5	26.9	70	1 REG1_BOVIN	P82943 bos taurus
27	118.5	26.9	98	1 SY19_HUMAN	O99731 homo sapien
28	115	26.1	99	1 SY02_MACFA	O9myn4 macaca fasc
29	113	25.6	99	1 MCPA_BOVIN	P28291 bos taurus
30	111	25.2	99	1 SY02_HUMAN	P13500 homo sapien
31	110	24.9	148	1 SY02_RAT	P14844 rattus norv
32	109.5	24.8	97	1 BOTA_HUMAN	P51671 homo sapien
33	109.5	24.8	108	1 SY19_MOUSE	O70460 mus musculu

34	109.5	24.8	119	1 SY24_MOUSE	O9jkc0 mus musculu
35	109	24.7	97	1 SY20_MOUSE	O89093 mus musculu
36	109	24.7	99	1 SY08_PIG	P49873 sus scrofa
37	108.5	24.6	92	1 SY04_RABIT	P46632 oryctolagus
38	107	24.3	99	1 SY08_BOVIN	O09141 bos taurus
39	107	24.3	101	1 SY02_CANFA	P52203 canis famil
40	106	24.0	94	1 SY26_HUMAN	O9y258 homo sapien
41	104	23.6	97	1 SY08_MOUSE	O9z121 mus musculu
42	103.5	23.5	119	1 SY24_HUMAN	O00175 homo sapien
43	102.5	23.2	148	1 SY02_MOUSE	P10148 mus musculu
44	99	22.4	134	1 SY21_HUMAN	O00585 homo sapien
45	98	22.2	120	1 SY23_HUMAN	P55773 homo sapien

ALIGNMENTS

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RN	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,			
RA	Leviton D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McIninch J., Elias C. III, Manthey C.L., Grosshans D.,			
RA	Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes.";			
RL	J. Biol. Chem. 272:25229-25237(1997).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE=99425270; PubMed=10493829;			
RA	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,			
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,			
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,			
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q.";			
RL	Genomics 60:295-308(1999).			
RN	[4]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Pancreas, and Spleen;			
RA	Straussberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,			
RA	Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

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chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1768(1998).
CC -!- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24306.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; Q98157; ICM9.
DR GENE; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24 SMALL INDUCIBLE CYTOKINE A22.
FT CHAIN 25 93 BY SIMILARITY.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 100.0%; Score 441; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.2e-46;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWVKMINKLSQ 82
DB 72 DKEICADPRVPWVKMINKLSQ 93

RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCU22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

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[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Shaniel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -!- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGP; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 70.3%; Score 310; DB 1; Length 92;
Best Local Similarity 65.4%; Pred. No. 1.4e-30;
Matches 53; Conservative 18; Mismatches 10; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWVKMINKLS 81
DB 72 NRDCADPRQVWVKLLHKL 92

RESULT 3
SY04_CHICK STANDARD; PRT; 90 AA.
AC Q90826; Q910C9;
DT 01-NOV-1997 (Rel. 35, Created)
DT 15-JUN-2002 (Rel. 41, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
DE protein 1-beta homolog).
GN SCIA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.

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RC TISSUE=Bone marrow;
RX MEDLINE=95369710; PubMed=7642115;
RA Petrenko O., Ischenko I., Enrietto P.J.;
RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
RT mammalian macrophage inflammatory protein-1 beta.";
RL Gene 160:305-306(1995).
[2]
RN SEQUENCE FROM N.A.
RP Hughes S.M., Bumstead N.;
RA "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
[3]
RN SEQUENCE OF 14-90 FROM N.A.
RP Petrenko O., Enrietto P.J.;
RA Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
RL
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
CC (BY SIMILARITY).
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
-----
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DR EMBL; L34553; AAA48747.1; -
DR EMBL; AJ243034; CAB45103.1; -
DR HSP; P13236; 1HUM.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 21 BY SIMILARITY.
FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
FT DISULFID 32 56 BY SIMILARITY.
FT DISULFID 33 72 BY SIMILARITY.
FT CONFLICT 87 87 M -> L (IN REF. 1).
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match 35.1%; Score 155; DB 1; Length 90;
Best Local Similarity 37.5%; Pred. No. 6.8e-12;
Matches 30; Conservative 18; Mismatches 30; Indels 2; Gaps 2;

QY 1 LVLLAVALQATAGPYGANNEDSVCCRDYVRVRLPLRVVVKHFVWTSDCPRGCVLLTFR 60
Db :|||:| | | | | | | | | | | | | | | | | | | | | | | | | | | |
10 VLLIACYQ-TSAAPVSDPPTS-CCFTYISQLPFSFVADYIYETNSQCPHAGVVFITRK 67
QY 61 DREICADRPVPWVKMLNKL 80
Db :|||:| | | | | | | | | | | | | | | | | | | | | | | | | | | |
68 GREVCANPENVQDYMNKM 87

RESULT 4
SY18_HUMAN STANDARD; PRT; 89 AA.
ID SY18_HUMAN
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DE 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.

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OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Li H., Ruben S.;
RT "Macrophage inflammatory protein-3 and -4.";
RL Patent number US5504003, 02-APR-1996.
[2]
RN SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RP TISSUE=Aorta, and Lung;
RX MEDLINE=97376836; PubMed=9233607;
RA Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
RA Miura R., Odenaker G., van Damme J., Yoshie O., Nomiya H.;
RT "A novel human CC chemokine PARC that is most homologous to
RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
RT T lymphocytes, but not for monocytes.";
RL J. Immunol. 159:1140-1149(1997).
[3]
RN SEQUENCE FROM N.A.
RP MEDLINE=98230488; PubMed=9570561;
RX Kodelja V., Mueller C., Pollitz O., Hakij N., Orfanos C.E., Goerd S.;
RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
RT structural homologue of macrophage inflammatory protein-1 alpha with
RT a Th2-associated expression pattern.";
RL J. Immunol. 160:1411-1418(1998).
[4]
RN DISCUSSION OF SEQUENCE.
RP MEDLINE=97275308; PubMed=9129202;
RX Wells T.N.C., Peitsch M.C.;
RT "The chemokine information source: identification and characterization
RT of novel chemokines using the WorldWideWeb and expressed sequence tag
RT databases.";
RL J. Leukoc. Biol. 61:545-550(1997).
[5]
RN SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
RP TISSUE=Dendritic cell;
RX MEDLINE=97336102; PubMed=9192897;
RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
RA Figdor C.G.;
RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
RT naive T cells.";
RL Nature 387:713-717(1997).
[6]
RN SEQUENCE FROM N.A.
RP MEDLINE=99168908; PubMed=10049593;
RX Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
RA Hughes A.L., Nomiya H.;
RT "Chemokine PARC gene (SCYA18) generated by fusion of two
RT MIP-1alpha/LD78alpha-like genes.";
RL Genomics 55:353-357(1999).
[7]
RN SEQUENCE FROM N.A., AND CHARACTERIZATION.
RP MEDLINE=99189237; PubMed=10087196;
RX Guan P., Burgess A.H.M., Cunningham A., Lira P., Brissette W.H.,
RA Neote K., McCall S.R.;
RT "Genomic organization and biological characterization of the novel
RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
RL Genomics 56:296-302(1999).
[8]
RN SEQUENCE FROM N.A.
RP Pollitz O., Kodelja V., Guillot P., Orfanos C.E., Goerd S.;
RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
RT within the first intron sequence.";
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
CC

```


Best Local Similarity 38.4%; Pred. No. 5.1e-10;
Matches 33; Conservative 13; Mismatches 34; Indels 6; Gaps 2;

QY 3 LLAVLAQYATGAGPYGANNEDSV-----CCRDYVRYRLPLRVVKHF-YWTSDSCPRGVVL 56
Db 6 LCLLLIANTISPOVLAGDVPSTVTCYVNVKQIHKVRLKSLYRRITSSQCPREAVIF 65

QY 57 LTFRDREICADPRVPVWVKMLNKLQ 82
Db 66 RTILDREICADPRKVKVNSINHLK 91

RESULT 9
ID SY05_MOUSE STANDARD; PRT; 91 AA.
AC P30882;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 13-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta) (Murantes).
GN SCY5.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP MEDLINE-92277950; PubMed-1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neillon E.G.;
RT "Isolation and characterization of cDNA from renal tubular epithelium
RT encoding murine Rantes.";
RL Kidney Int. 41:220-225(1992).
RN [2]
RP MEDLINE-92277950; PubMed-1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neillon E.G.;
RT "Molecular cloning and expression of the murine RANTES cytokine:
RT structural and functional conservation between mouse and man.";
RL Eur. J. Immunol. 22:1477-1481(1992).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=NIH Swiss;
RX MEDLINE-94132613; PubMed-7507961;
RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neillon E.G.;
RT "Cloning, genomic organization, and chromosomal localization of the
RL J. Immunol. 152:1182-1189(1994).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RX MEDLINE-94217689; PubMed-7513046;
RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
RA Paznekas W.A.;
RT "Definition of a lipopolysaccharide-responsive element in the 5'-
RT flanking regions of Murantes and crg-2.";
RL Mol. Cell. Biol. 14:2914-2925(1994).
RN [5]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/CJ.B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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or send an email to license@isb-sib.ch).

CC EMBL; M77747; AAA40029.1; -
CC EMBL; S37648; AAB22330.1; -
CC EMBL; U02298; AAA18302.1; -
CC EMBL; X70675; CAA50011.1; -
CC EMBL; AF065944; AAC17511.1; -
CC EMBL; AF065945; AAC17512.1; -
CC EMBL; AF065946; AAC17513.1; -
CC EMBL; AF065947; AAC17514.1; -
CC HSSP; P13501; 1RTN.
CC MGD; MGI:98262; SCY5.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 23 POTENTIAL.
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT CONFLICT 19 19 T -> A (IN REF. 2).
FT CONFLICT 41 41 A -> E (IN REF. 1).
SQ SEQUENCE 91 AA; 10071 MW; 5DFD66F4684FE1C8 CRC64;

QY 1 LVLVALVAL-QATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVL 59
Db 10 ILTLAALCTPAPAPSPYGS--DTTPCCFAYLSLALPRAHVKEYFTSSKCSNLAVV 67
QY 60 RDKKICADPRVPVWVKMLNKL 80
Db 68 RNRQVCANPEKKWQVEYINYL 88

RESULT 10
ID SY04_RAT STANDARD; PRT; 92 AA.
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta).
GN SCY44 OR MIP1B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC modified and this statement is not removed. Usage by and for commercial


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DR EMBL; AF065942; AAC17509.1; -.
DR EMBL; AF065943; AAC17510.1; -.
DR PIR; A27596; A27596.
DR PIR; A30552; A30552.
DR PIR; A32393; A32393.
DR PIR; S04533; S04533.
DR PIR; S11685; S11685.
DR HSP; P13236; 1HUM.
DR MGD; MGI:98260; Scy3.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
FT DISULFID 34 57 BY SIMILARITY.
FT DISULFID 35 73 BY SIMILARITY.
FT CONFLICT 22 22 F -> L (IN REF. 3).
FT CONFLICT 62 62 V -> A (IN REF. 3).
SQ SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DEDD38 CRC64;

Query Match 29.9%; Score 132; DB 1; Length 92;
Best Local Similarity 36.8%; Pred. No. 4.2e-09;
Matches 25; Conservative 17; Mismatches 24; Indels 2; Gaps 2;

QY 13 AGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVVLTFRDKETCADPRYPW 72
Db :||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:|
23 SAPYGAD-TPTACCFYSR-KIPROFIVDYFETSLCSQPGVIFLTRNRQICADSKETW 80
QY 73 VKMLNKL 80
Db :|:|
81 VQEVITDL 88

RESULT 14
SY04_HUMAN STANDARD; PRT; 92 AA.
AC P13236; P22617; Q13704.
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2)
DE (PAT 744) (H400) (SIS-gamma) (Lymphocyte activation gene-1 protein)
DE (LAG-1) (HC21) (G-26 T lymphocyte-secreted protein).
GN SCY4 OR MIP1B OR LAG1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-89071764; PubMed-2462251;
RA Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard W.J.;
RT "Identification, cloning, and characterization of an immune
RT activation gene.";
RL Proc. Natl. Acad. Sci. U.S.A. 85:9704-9708(1988).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE-89140347; PubMed-2521882;
RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
RT "Mitogenic activation of human T cells induces two closely related
RT genes which share structural similarities with a new family of
RT secreted factors.";
RL J. Immunol. 142:1582-1590(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE-89093958; PubMed-2521353;
RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
RT "A family of small inducible proteins secreted by leukocytes are
RT members of a new superfamily that includes leukocyte and fibroblast-
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RT derived inflammatory agents, growth factors, and indicators of various
RT activation processes.";
RL J. Immunol. 142:679-687(1989).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE-91061800; PubMed-2247088;
RA Baixeras E., Roman-Roman S., Jitsukawa S., Genevee C., Mechiche S.,
RA Viegas-Pequignot E., Hercend T., Triebel F.;
RT "Cloning and expression of a lymphocyte activation gene (LAG-1).";
RL Mol. Immunol. 27:11091-1102(1990).
RN [5]
RP SEQUENCE FROM N.A.
RC TISSUE-T-Cell;
RX MEDLINE-89325421; PubMed-2568930;
RA Chang H.C., Reinherz E.L.;
RT "Isolation and characterization of a cDNA encoding a putative
RT cytokine which is induced by stimulation via the CD2 structure on
RT human T lymphocytes.";
RL Eur. J. Immunol. 19:1045-1051(1989).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE-91373378; PubMed-1894635;
RA Napolitano M., Modi W.S., Cevario S.J., Gnarra J.R., Seunanez H.N.,
RA Leonard W.J.;
RT "The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax
RT responsiveness of 5' upstream sequences, and chromosomal
RT localization.";
RL J. Biol. Chem. 266:17531-17536(1991).
RN [7]
RP SEQUENCE FROM N.A.
RA Birren B., Fasman K., McKernan K., Nusbaum C., Richardson P.,
RA Lander E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE OF 6-92-FROM N.A.
RX MEDLINE-90038522; PubMed-2809212;
RA Miller M.D., Hata S., Waal Malefyt R., Krangel M.S.;
RT "A novel polypeptide secreted by activated human T lymphocytes.";
RL J. Immunol. 143:2907-2916(1989).
RN [9]
RP RECEPTOR INTERACTION.
RX MEDLINE-98180363; PubMed-9521068;
RA Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G.,
RA Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
RA Napolitano M.;
RT "Identification of the CC chemokines TARC and macrophage inflammatory
RT protein-1 beta as novel functional ligands for the CCR8 receptor.";
RL Eur. J. Immunol. 28:582-588(1998).
RN [10]
RP FUNCTION.
RX MEDLINE-96106406; PubMed-8525373;
RA Cocchi F., Devico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
RN [11]
RP STRUCTURE BY NMR.
RX MEDLINE-94182137; PubMed-8134838;
RA Lodi P.J., Garrett D.S., Kuscewski J., Tsang M.L.S., Weatherbee J.A.,
RA Leonard W.J., Gronenborn A.M., Clore G.M.;
RT "High-resolution solution structure of the beta chemokine hMIP-1 beta
RT by multidimensional NMR.";
RL Science 263:1762-1767(1994).
CC -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC BINDS TO CCR5 AND TO CCR8. ONE OF THE MAJOR HIV-SUPPRESSIVE
CC FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-BETA INDUCES A
CC DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
CC AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
CC -!- SUBUNIT: HOMODIMER.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- INDUCTION: BY MITOGENS.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
```

CC C-C) (CHEMOKINE CC).

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CC -----

DR EMBL; M23502; AAA36656.1; -

DR EMBL; M25316; AAA57256.1; -

DR EMBL; J04130; AAA51576.1; -

DR EMBL; X53683; CAA37723.1; -

DR EMBL; X53682; CAA37722.2; ALT_SEQ.

DR EMBL; X16166; CAA34291.1; -

DR EMBL; M69203; AAB00790.1; -

DR EMBL; M69201; AAB00790.1; JOINED.

DR EMBL; M69202; AAB00790.1; JOINED.

DR EMBL; AC003976; -; NOT_ANNOTATED_CDS.

DR EMBL; M57503; AAA36752.1; -

DR PIR; A31767; A31767.

DR PIR; B30574; B30574.

DR PIR; D30552; D30552.

DR PIR; JH0319; JH0319.

DR PIR; A37411; A37411.

DR PDB; 1HUM; 30-APR-94.

DR PDB; 1HUN; 30-APR-94.

DR Genew; HGNC:10630; SCY44.

DR MIM; 182284; -

DR InterPro; IPR000827; CC_chemokine_sml.

DR InterPro; IPR001811; Chemokine_IL8.

DR Pfam; PF00048; IL8; 1.

DR SMART; SM00199; SCY; 1.

DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

KW Cytokine; Chemotaxis; Inflammatory response; Signal; 3D-structure.

FT SIGNAL 1 23

FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A4.

FT DISULFID 34 58 BY SIMILARITY.

FT DISULFID 35 74 BY SIMILARITY.

FT CONFLICT 6 6 T -> C (IN REF. 7).

FT CONFLICT 15 15 A -> S (IN REF. 6).

FT CONFLICT 20 20 P -> L (IN REF. 2).

FT CONFLICT 40 45 ARKLPR -> REASS (IN REF. 3).

FT CONFLICT 56 56 S -> I (IN REF. 8).

FT CONFLICT 70 70 S -> G (IN REF. 6).

FT CONFLICT 80 80 S -> T (IN REF. 7 AND 8).

FT STRAND 29 29

FT STRAND 33 33

FT HELIX 45 47

FT STRAND 50 53

FT STRAND 63 66

FT STRAND 72 75

FT TURN 77 78

FT HELIX 80 90

SQ SEQUENCE 92 AA; 10212 MW; F2EA7CF341B0E258 CRC64;

Query Match 29.8%; Score 131.5; DB 1; Length 92;

Best Local Similarity 36.5%; Pred. No. 4.8e-09;

Matches 27; Conservative 12; Mismatches 34; Indels 1; Gaps 1;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYRVRLPLRVVKKHYFTWSDSCPRPGVLLTFR 60

Db 11 LMLVAFCSPALAPMGSD-PPTACCFSTARKLPRNFVVDYETSSLCSPQAVVFTQKR 69

QY 61 DKEICADPRVPWK 74

Db 70 SKQVCADPSESQVQ 83

RESULT 15

VMI2_KSHV

ID VMI2_KSHV STANDARD; PRT; 94 AA.

AC Q98157;

DT 16-OCT-2001 (Rel. 40, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 16-OCT-2001 (Rel. 40, Last annotation update)

DE Viral macrophage inflammatory protein-II precursor (VMIP-II) (VMIP-

DE 1B).

GN ORF K4.

OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).

OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;

OC Gammaherpesvirinae; Rhadinovirus.

OX NCBI_taxid=37296;

RN [1]

RP SEQUENCE FROM N.A.

RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo D.,

RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;

RT "Kaposi's sarcoma-associated human herpesvirus-8 encodes homologs

RT of macrophage inflammatory protein-1 and interleukin-6.";

RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.

RN [2]

RP SEQUENCE FROM N.A.

RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;

RT "Molecular mimicry of human cytokine and cytokine response pathway

RT genes by KSHV.";

RL Science 274:1739-1744(1996).

RN [3]

RP SEQUENCE FROM N.A.

RA Russo J.P., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,

RA Parry J.J., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;

RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus

RT (HHV8).";

RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).

RN [4]

RP SEQUENCE FROM N.A.

RA Sun R., Lin S.-F., Miller G.;

RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.

RN [5]

RP X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).

RA MEDLINE=20496762; PubMed=11041848;

RT Fernandez E.J., Wilken J., Thompson D.A., Pelper S.C., Lolis E.;

RT "Comparison of the structure of VMIP-II with eotaxin-1, RANTES, and

RL MCP-3 suggests a unique mechanism for CCR3 activation.";

RN Biochemistry 39:12837-12844(2000).

RN [6]

RP STRUCTURE BY NMR.

RA MEDLINE=20060979; PubMed=10595530;

RA Liwang A.C., Wang Z.-X., Sun Y., Pelper S.C., Liwang P.J.;

RT "The solution structure of the anti-HIV chemokine VMIP-II.";

RL Protein Sci. 8:2270-2280(1999).

CC !- FUNCTION: BLOCKS INFECTION BY SEVERAL DIFFERENT HUMAN

CC IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1) STRAINS. THIS OCCURS BECAUSE

CC VMIP-II BINDS TO A WIDE RANGE OF CHEMOKINE RECEPTORS. MAY FORM

CC PART OF THE RESPONSE TO HOST DEFENSES CONTRIBUTING TO VIRUS-

CC INDUCED NEOPLASIA AND MAY HAVE RELEVANCE TO KSHV AND HIV-1

CC INTERACTIONS.

CC !- SUBUNIT: MONOMER.

CC !- SUBCELLULAR LOCATION: Secreted.

CC !- SIMILARITY: BELONGS TO THE INTERCINE BETA FAMILY (SMALL CYTOKINE

CC C-C) (CHEMOKINE CC).

CC -----

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CC or send an email to license@isb-sib.ch).

CC -----

DR EMBL; U67775; AAB61702.1; -

DR EMBL; U75698; AAC57093.1; -

DR EMBL; U93872; AAB62642.1; -

DR EMBL; U71365; AAC34941.1; -

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 15.1597 Seconds
(without alignments)
1114.528 Million cell updates/sec

Title: US-09-509-165a-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYGANM.....EICADPRVPWVKMILNKLKLSQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL_21.*
1: sp_archaea.*
2: sp_bacteria.*
3: sp_fungi.*
4: sp_human.*
5: sp_invertebrate.*
6: sp_mammal.*
7: sp_mhc.*
8: sp_organelle.*
9: sp_phase.*
10: sp_plant.*
11: sp_rodent.*
12: sp_virus.*
13: sp_vertebrate.*
14: sp_unclassified.*
15: sp_rvirus.*
16: sp_bacteriaph.*
17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	315	71.4	81	11 Q9QZU1	Q9qzu1 rattus norv
2	311	70.5	92	11 Q9IZH5	Q9izh5 rattus norv
3	310	70.3	92	11 Q9QZU2	Q9qzu2 mus musculus
4	158.5	35.9	95	12 Q98158	Q98158 kaposi's sa
5	156	35.4	90	13 Q9PWA6	Q9pwa6 gallus gall
6	155	35.1	90	13 Q91OC9	Q91oc9 gallus gall
7	153	34.7	91	13 Q8QG57	Q8qg57 gallus gall
8	152.5	34.6	92	11 Q91ZL0	Q91zl0 sigmodon hi
9	148	33.6	89	13 Q91RE0	Q91re0 gallus gall
10	142	32.2	92	11 Q91Z65	Q91z65 sigmodon hi
11	136	30.8	92	6 Q8SQ40	Q8sq40 felis silve
12	131.5	29.8	91	11 Q91ZL1	Q91zl1 sigmodon hi
13	131	29.7	93	6 Q8SQA6	Q8sqa6 bos taurus
14	124	28.1	93	4 Q96168	Q96168 homo sapien
15	123	27.9	99	6 Q95N01	Q95n01 canis famil
16	118	26.8	91	13 Q8QG56	Q8qg56 gallus gall

17	117	26.5	80	4 Q14745	Q14745 homo sapien
18	116	26.3	93	11 Q9WU26	Q9wuz6 mus musculus
19	116	26.3	131	11 Q9R043	Q9r043 mus musculus
20	109.5	24.8	79	4 Q95689	Q95689 homo sapien
21	108.5	24.6	93	11 Q9ERE0	Q9ere0 rattus norv
22	107	24.3	100	6 Q95MD5	Q95md5 bos taurus
23	104.5	23.7	148	11 Q9QYD7	Q9qyd7 mus musculus
24	101.5	23.0	116	11 Q9D830	Q9db30 mus musculus
25	98.5	22.3	100	13 Q8QG55	Q8qg55 gallus gall
26	97.5	22.1	116	11 Q9M24	Q9m24 mus musculus
27	97	22.0	97	6 Q9TTS6	Q9tts6 bos taurus
28	97	22.0	97	11 Q9Z318	Q9z318 cavia porce
29	97	22.0	106	11 Q9Z292	Q9z292 cricetus
30	96.5	21.9	75	6 Q9TQ1	Q9ttq1 equus cabal
31	95	21.5	133	11 Q91V84	Q91v84 mus musculus
32	94	21.3	100	6 Q9TQ4	Q9ttq4 equus cabal
33	93	21.1	97	6 Q9BDJ2	Q9bdj2 bos taurus
34	93	21.1	99	6 Q9TTQ3	Q9ttq3 equus cabal
35	89	20.2	81	6 Q9TTQ2	Q9ttq2 equus cabal
36	88	20.0	115	12 Q9WRT7	Q9wrt7 macaca mula
37	88	20.0	118	12 Q9J2M1	Q9j2m1 macaca mula
38	85.5	19.4	96	6 Q8SQB1	Q8sqb1 bos taurus
39	83.5	18.9	395	11 Q91V44	Q91v44 mus musculus
40	82	18.6	98	13 Q8QGV8	Q8qgv8 paralichthy
41	82	18.6	109	13 Q90Y59	Q90y59 paralichthy
42	80	18.1	100	13 Q9PT04	Q9pt04 oncorhynch
43	78	17.7	100	13 Q9PT07	Q9pt07 oncorhynch
44	78	17.7	100	13 Q9PT06	Q9pt06 oncorhynch
45	78	17.7	100	13 Q9PT05	Q9pt05 oncorhynch

ALIGNMENTS

RESULT 1

ID	Q9QZU1	PRELIMINARY;	PRT;	81 AA.
AC	Q9QZU1;			
DT	01-MAY-2000 (Tremblrel. 13, Created)			
DT	01-MAY-2000 (Tremblrel. 13, Last sequence update)			
DT	01-JUN-2001 (Tremblrel. 17, Last annotation update)			
DE	Macrophage-derived chemokine (Fragment).			
OS	Rattus norvegicus (Rat).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.			
OX	NCBI_TaxID=10116;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;			
RA	Chantray D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,			
RA	Gray P.W.,			
RT	Macrophage derived chemokine is localized to thymic medullary			
RT	epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-			
RT	thymocytes."			
RL	Blood 0:0-0(1999).			
DR	EMBL; AF163477; AAD55764.1; ..			
DR	HSSP; Q98157; 1CM9			
DR	InterPro; IPR001811; Chemokine_IL8.			
DR	Pfam; PF000048; IL8; 1.			
DR	SMART; SM00199; SCY; 1.			
FT	NON_TER 1			
SQ	SEQUENCE 81 AA; 9212 MW; AOA7ED1A0045D80B CRC64;			

Query Match 71.4%; Score 315; DB 11; Length 81;

Best Local Similarity 67.9%; Pred. No. 1.7e-34;

Matches 55; Conservative 16; Mismatches 10; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVKKHYFTSDSCPRPGVLLTFR 60

Db 1 LVLLAVALQTSDRAGPYGANVEDSICCDYIRHPLPPRFVKEFYWTSKSRKPGVLLTIIK 60

QY 61 DKEICADPRVPWVKMILNKLKLS 81

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Db 61 NRDCADPRMLWVKILHKL 81
RESULT 2
Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TRENBLrel. 19, Created)
DT 01-DEC-2001 (TRENBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TRENBLrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
BA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis."; to the EMBL/GenBank/DBJ databases.
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 70.5%; Score 311; DB 11; Length 92;
Best Local Similarity 66.7%; Pred. NO. 6.7e-34;
Matches 54; Conservative 16; Mismatches 11; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANVEDSICCQDIIRHPLPFRVFKFVWTSKCRKPGVVLLITIK 71
QY 61 DKEICADPRVPVWVKMLNKL 81
Db 72 NRDCADPRMLWVKILHKL 92

RESULT 3
Q90ZU2 PRELIMINARY; PRT; 92 AA.
AC Q90ZU2;
DT 01-MAY-2000 (TRENBLrel. 13, Created)
DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TRENBLrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantray D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-(1999).
DR EMBL; AF163476; AAD55763.1; -.
DR HSP; Q98157; 1CM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;
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OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4."
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL: AJ243034; CAB45103.1; -
DR InterPro: IPR000827; CC_Chemokine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN 1.
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match 35.1%; Score 155; DB 13; Length 90;
Best Local Similarity 37.5%; Pred. No. 5.5e-13;
Matches 30; Conservative 18; Mismatches 30; Indels 2; Gaps 0

Qy 1 LVLLAVALQATGAGPYGANNEDSVCCRDYRVRLPLRVVKHFFYWTSDSCPRGVVLLTFR 60
Db 10 VLLIATCYQ-TSAAPVGSPPPTS-CCFTYISRLQDPFSFVADYETNSQCPRAGVVFTFRK 67

Qy 61 DKEICADPRVPVVKMILNKL 80
Db 68 GREVCANPDNDWQDYNNKM 87

RESULT 7
Q8QG57 Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Chemokine ab294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
RT chicken CC chemokines."
RL Immunogenetics 53:674-683(2001).
DR EMBL: AY037859; AAK84432.1; -
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match 34.7%; Score 153; DB 13; Length 91;
Best Local Similarity 35.0%; Pred. No. 1e-12;
Matches 28; Conservative 20; Mismatches 30; Indels 2; Gaps 0

Qy 1 LVLLAVALQATGAGPYGANNEDSVCCRDYRVRLPLRVVKHFFYWTSDSCPRGVVLLTFR 60
Db 11 ILLVAALFFQASSSPFGA--DTTVCCFNYSVRKLPQNHKDYFTYSSKCPQAQAVVFTFRK 68

Qy 61 DKEICADPRVPVVKMILNKL 80
Db 69 GRQVCANPDARVWKYINEL 88

RESULT 8
Q91ZL0 Q91ZL0 PRELIMINARY; PRT; 92 AA.
AC Q91ZL0;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)

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DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21EFA9C2E CRC64;

Query Match 34.6%; Score 152.5; DB 11; Length 92;
Best Local Similarity 41.2%; Pred. No. 1.2e-12;
Matches 33; Conservative 10; Mismatches 36; Indels 1; Gaps 1;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 60
DB 11 LLLLAECAPVTSAPRGSDPPIS-CCFSYASRKLPRNFVTDYETSSLCSPKPAVVLTFRK 69
QY 61 DKEICADPRVPWVKMLNKL 80
DB 70 GKEVCADPSQPVWNEYVNDL 89

RESULT 9
QY18E0 Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0;
DT 01-OCT-2000 (Tremblrel. 15, Created)
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=20170941; PubMed=10704244;
RX Sick C., Schneider K., Staeheli P., Weining K.C.;
RT "Novel chicken CXCL2 and CXCL3 chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSP; P13236; IHUM.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW SIGNAL.
FT SIGNAL.
FT CHAIN.
FT SIGNAL.
FT CHAIN.
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match 33.6%; Score 148; DB 13; Length 89;
Best Local Similarity 28.4%; Pred. No. 4.7e-12;
Matches 23; Conservative 24; Mismatches 32; Indels 2; Gaps 1;

QY 2 VLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 61
DB 10 LLIASFCSSAPVGPDPV--PTCCTTYITHKIPNLRIQRYSTSTSCSKPAIIFTKKE 67
QY 62 KEICADPRVPWVKMLNKL 82
DB 62 KEICADPRVPWVKMLNKL 82

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Db 68 REVCANPSDPWQRYLOSVKR 88

RESULT 10
QY1265 Q91265 PRELIMINARY; PRT; 92 AA.
AC Q91265;
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIP1 ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY059407; AAL26704.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;

Query Match 32.2%; Score 142; DB 11; Length 92;
Best Local Similarity 34.6%; Pred. No. 3.1e-11;
Matches 28; Conservative 19; Mismatches 30; Indels 4; Gaps 3;

QY 2 VLLAVALQATE--AGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 59
DB 10 VLLCIITLCNQVFSAPYGAD-TPTFCFCFSYGR-QIPRKFIADYFQTSSLCSEPGIIFLTK 67
QY 60 RDKEICADPRVPWVKMLNKL 80
DB 68 RNRHVCADPKETWVQEIITDL 88

RESULT 11
QY18E0 Q8SQ40 PRELIMINARY; PRT; 92 AA.
AC Q8SQ40;
DT 01-JUN-2002 (Tremblrel. 21, Created)
DT 01-JUN-2002 (Tremblrel. 21, Last sequence update)
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)
DE RANTES protein.
GN RANTES.
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Felidae; Felis.
OX NCBI_TaxID=9685;
RN [1]
RP SEQUENCE FROM N.A.
RA Kimura T., Kano R., Hasegawa A.;
RT "Molecular cloning of feline RANTES gene.";
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB083479; BAB88940.1; -.
SQ SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;

Query Match 30.8%; Score 136; DB 6; Length 92;
Best Local Similarity 36.0%; Pred. No. 2e-10;
Matches 27; Conservative 17; Mismatches 27; Indels 4; Gaps 2;

QY 2 VLLAVALQAT--EAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 59
DB 10 VLLTAFAAFTPASAPSYAS--DTTPCCFAYLPLHLPLHLQEIYFYTSKSKMPAVVFTVR 67
QY 60 RDKEICADPRVPWVK 74
DB 60 RDKEICADPRVPWVK 74

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Db 68 RKRQVCANPQKKWVR 82

RESULT 12

Q912L1 ID Q912L1 PRELIMINARY; PRT; 91 AA.
AC Q912L1
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE RANTES chemokine.
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RL "Sigmmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF421391; AAL16932.1; -
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 91 AA; 10082 MW; D0D6EAEABE4242FF CRC64;

Query Match 29.8%; Score 131.5; DB 11; Length 91;
Best Local Similarity 36.6%; Pred. No. 7.8e-10;
Matches 30; Conservative 19; Mismatches 28; Indels 5; Gaps 3;
Qy 1 LVLLAVALQA-TEAGPYGANNEDSV-CCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTF 58
Db 10 VLMASLCPASAPNGS---DTIPCCFAYLSAVLPAHVKEFYFTSSQCSKPGVIFQTK 66
Qy 59 FRKEICADRPVPVVKMILNKL 80
Db 67 RNRQVCANPKKWKQVEYNVL 88

RESULT 13

Q8SOA6 ID Q8SOA6 PRELIMINARY; PRT; 93 AA.
AC Q8SOA6;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RA Werling D.;
RL "Role of chemokines in RSV infection.";
RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY07840; AAL78060.1; -
SQ SEQUENCE 93 AA; 10118 MW; 1266BFBFCE5E8E9 CRC64;

Query Match 29.7%; Score 131; DB 6; Length 93;
Best Local Similarity 32.1%; Pred. No. 9.3e-10;
Matches 26; Conservative 21; Mismatches 32; Indels 2; Gaps 2;
Qy 1 LVLLAVAL-QATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTF 59
Db 10 VLLCAMALCSQVFSAPPGAD-TPTACCFSVARQLSRKIVADYFETSSQCSKPGVIFQTK 68
Qy 60 RKEICADRPVPVVKMILNKL 80
Db 69 KGRQVCANPTEDWVQVEYITDL 89

RESULT 14

Q96I68 ID Q96I68 PRELIMINARY; PRT; 93 AA.
AC Q96I68;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Similar to small Inducible cytokine A3 (homologous to mouse Mip-1a).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=B-CELL;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC007783; AA07783.1; -
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;

Query Match 28.1%; Score 124; DB 4; Length 93;
Best Local Similarity 31.2%; Pred. No. 8.1e-09;
Matches 25; Conservative 17; Mismatches 36; Indels 2; Gaps 2;
Qy 1 LVLLAVALQA-TEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTF 60
Db 12 LCTMALCNQVLSA-PLAAD-TPTACCFYSRIPQNFINDYFETSSQCSKPSVIFLTR 69
Qy 61 DKEICADRPVPVVKMILNKL 80
Db 70 GRQVCADPSEEWVQKVSOL 89

RESULT 15

Q95N01 ID Q95N01 PRELIMINARY; PRT; 99 AA.
AC Q95N01;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Chemokine.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RA Maeda S., Mizuno T., Yamashita K., Kurata K., Masuda K., Ohno K.,
RA Tsujimoto H.;
RL "Molecular Cloning of Canine Thymus and Activation-Regulated Chemokine (TARC) Gene and its Expression in Various Tissues.";
RL J. Vet. Med. Sci. 0:0-0(2001).
DR EMBL: AB054642; BAB62131.1; -
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 99 AA; 11052 MW; 68A2BEDDF857BE81 CRC64;

Query Match 27.9%; Score 123; DB 6; Length 99;
Best Local Similarity 33.3%; Pred. No. 1.2e-08;
Matches 27; Conservative 17; Mismatches 35; Indels 2; Gaps 2;
Qy 2 VLLAVALQA-TEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTF 61
Db 12 LLLGASLQVTHAA-RGTNV-GRECCLEYFKGAIPISRLTRWYKTSGSCPKDAIVFVTVQG 69

QY 62 KEICADPRVPWVKMILNKLQ 82
| | | | | : | :
Db 70 KSICSDPKDKKRVKAVRYLQ 90

Search completed: July 28, 2003, 04:02:51
Job time : 15.1597 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 20.3193 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARIQTALLVVLVLLAVALQ.....XICADPRVXXXXMILNKLSQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :				A_Geneseq_101002.*			
Result No.	Score	Query Match	Length	ID	Description		
1	446	97.4	93	AAW20059	Human macrophage d		
2	446	97.4	93	AAW20059	Macrophage derived		
3	446	97.4	93	AAW20059	Human macrophage-d		
4	445	97.2	93	AAW20058	Macrophage derived		
5	445	97.2	93	AAW20058	Amino acid sequenc		
6	445	97.2	93	AAW59433	Human chemokine pr		
7	445	97.2	93	AAW40811	Macrophage-derived		
8	445	97.2	93	AAW26175	Macrophage-derived		
9	445	97.2	93	AAW24414	Human macrophage d		
10	445	97.2	93	AAW05871	Human macrophage-d		

SUMMARIES

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

11	445	97.2	93	20	AAW06829	Macrophage derived
12	445	97.2	93	21	AAW07500	A human monokine d
13	445	97.2	93	23	AAO14046	Human macrophage-d
14	440	96.1	93	18	AAW07604	Cytokine beta-13 s
15	440	96.1	93	19	AAW57881	Human chemokine be
16	440	96.1	93	22	AAW68352	Amino acid sequenc
17	436	95.2	93	20	AAW05879	Human macrophage-d
18	419	91.5	93	20	AAW05880	Macaque macrophage
19	413	90.2	85	19	AAW59432	Human chemokine pr
20	343	74.9	69	18	AAW20061	Human macrophage d
21	343	74.9	69	20	AAW24415	Macrophage derived
22	343	74.9	69	20	AAW05874	Human macrophage-d
23	342	74.7	69	23	AAO20022	Human chemokine MD
24	342	74.7	69	23	AAO14155	Human MDC protein.
25	342	74.7	70	18	AAW20060	Human macrophage d
26	342	74.7	70	20	AAW24413	Macrophage derived
27	342	74.7	70	20	AAW05873	Human macrophage-d
28	342	74.7	154	20	AAW05878	Yeast pre-pro-alpha
29	342	74.7	172	20	AAW29895	Human MDC and huma
30	342	74.7	334	20	AAW29904	Human MDC and huma
31	342	74.7	587	20	AAW29900	Human MDC and HIV-
32	336	73.4	68	18	AAW17668	Stem cell mobilisi
33	322	70.3	69	18	AAW20062	Human macrophage d
34	322	70.3	69	20	AAW24416	Macrophage derived
35	322	70.3	69	20	AAW05875	Human macrophage-d
36	299	65.3	473	22	AAW61797	Chimeric chemokine
37	297	64.8	92	19	AAW59434	Mouse chemokine pr
38	295	64.4	92	20	AAW05876	Mouse macrophage-d
39	268	58.5	81	20	AAW05877	Rat macrophage-der
40	231	50.4	68	22	AAW61808	Murine MDC mature
41	231	50.4	68	23	AAW78392	Mouse chemokine mM
42	231	50.4	68	23	AAW68355	Murine chemokine m
43	193	42.1	37	22	ABW35053	Peptide #6559 enco
44	193	42.1	37	22	AAW59705	Human brain expres
45	193	42.1	37	22	AAW72285	Human bone marrow

ALIGNMENTS

RESULT 1				AAW20059 standard; Protein; 93 AA.			
ID	AAW20059	standard; Protein; 93 AA.					
XX							
AC	AAW20059;						
XX							
DT	11-SEP-1997	(first entry)					
XX							
DE	Human macrophage derived chemokine analogue.						
XX							
KW	MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;						
KW	rheumatoid arthritis; chemotaxis; fibroblast proliferation;						
KW	wound healing; angiogenesis; inflammation.						
XX							
OS	Synthetic.						
XX							
XX							
FT	Key	Location/Qualifiers					
FT	Misc-difference 48	/label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser,					
FT		Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,					
FT		Cys, Met					
FT	Misc-difference 51	/label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser,					
FT		Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,					
FT		Cys, Met					
FT	Misc-difference 54	/label= Tyr, Ser, Lys, Arg, His, Asp, Glu, Asn,					
FT		Gln, Cys					
FT	Misc-difference 74	/label= Glu, Lys, Arg, His, Gly, Ala					
FT	Misc-difference 83	/label= Trp, Ser, Lys, Arg, His, Asp, Glu, Asn,					
FT		Gln, Cys					

FT Misc-difference 84
 FT /label= Val, Ser, Lys, Arg, His, Asp, Glu, Asn,
 FT Gln, Cys
 PN W09640923-A1.
 XX 19-DEC-1996.
 XX 07-JUN-1996; 96WO-US10114.
 XX 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 9; Page 82; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 97.4%; Score 446; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.7e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
 Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
 QY 61 PRPGVLLTFRDXKXICADPRVPXXXKMLNKLKLSQ 93
 Db 61 PRPGVLLTFRDXKXICADPRVPXXXKMLNKLKLSQ 93
 RESULT 2
 AAY24417
 XX ID AAY24417 standard; peptide; 93 AA.
 AC AAY24417;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Macrophage derived chemokine analogue general formula.
 XX
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Misc-difference 48
 FT /label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr,
 FT

FT Misc-difference 51
 FT Phe, Tyr, Trp, Asp, Glu, Asn, Gln, Cys, Met
 FT /label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr,
 FT Phe, Tyr, Trp, Asp, Glu, Asn, Gln, Cys, Met
 FT Misc-difference 54
 FT /label= Arg, Ser, Lys, Tyr, His, Asp, Glu, Asn, Gln, Cys
 FT 74
 FT /label= Arg, Gly, Ala, Lys, His, Glu
 FT Misc-difference 83
 FT /label= Arg, Lys, Ser, His, Trp, Asp, Glu, Asn, Gln, Cys
 FT Misc-difference 84
 FT /label= Arg, Lys, Val, Ser, His, Asp, Glu, Asn, Gln, Cys
 XX
 XX US5932703-A.
 PN
 XX 03-AUG-1999.
 PD
 XX 07-JUN-1996; 96US-0660542.
 PF
 XX 07-JUN-1996; 96US-0660542.
 PR
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX
 XX (ICOS-) ICOS CORP.
 PA
 XX Godiska R, Gray PW;
 PI
 XX WPI; 1999-443621/37.
 DR
 XX Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 PT
 XX Example 11; Column 25-27; 43pp; English.
 PS
 XX The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. MDC analogues are capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogues may be used to modulate
 CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 CC
 SQ Sequence 93 AA;
 Query Match 97.4%; Score 446; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.7e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
 Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
 QY 61 PRPGVLLTFRDXKXICADPRVPXXXKMLNKLKLSQ 93
 Db 61 PRPGVLLTFRDXKXICADPRVPXXXKMLNKLKLSQ 93
 RESULT 3
 AAY05872
 XX ID AAY05872 standard; Protein; 93 AA.
 AC AAY05872;
 XX
 DT 02-AUG-1999 (first entry)
 XX
 DE Human macrophage-derived C-C chemokine MDC analogue.
 XX
 KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX OS Homo sapiens.
XX OS Synthetic.
XX FH Location/Qualifiers
FT Peptide
FT /note= "signal peptide"
FT Protein
FT /note= "mature protein"
FT Misc-difference 48
FT /label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser,
FT Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,
FT Cys, Met
FT Misc-difference 51
FT /label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser,
FT Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,
FT Cys, Met
FT Misc-difference 54
FT /label= Tyr, Ser, Lys, Arg, His, Asp, Glu, Asn,
FT Gln, Cys
FT Misc-difference 74
FT /label= Glu, Lys, Arg, His, Gly, Ala
FT Misc-difference 83
FT /label= Trp, Ser, Lys, Arg, His, Asp, Glu, Asn,
FT Gln, Cys
FT Misc-difference 84
FT /label= Val, Ser, Lys, Arg, His, Asp, Glu, Asn,
FT Gln, Cys
XX WO9915666-A2.
XX 01-APR-1999.
XX 28-SEP-1998; 98WO-US20270.
XX 28-APR-1998; 98US-0067447.
XX 26-SEP-1997; 97US-0939107.
XX (ICOS-) ICOS CORP.
XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
XX WPI; 1999-254715/21.
XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
XX Example 11; Page 59; 147pp; English.
XX The present sequence represents synthetic analogues of the novel
XX human macrophage derived C-C chemokine MDC that contain amino acid
XX alterations compared with native MDC (see AAY05871). Such MDC
XX polypeptide analogues are specifically contemplated to modulate
XX the binding characteristics of MDC to chemokine receptors and/or
XX other molecules that are considered to be important in presenting
XX MDC to its receptor. The MDC antagonists are used in claimed
XX methods for the preparation of medicaments for the suppression of
XX the proliferation of a mammalian immunodeficiency virus, for
XX inhibiting platelet aggregation in a mammal, for the treatment or
XX palliation of lupus erythematosus in a mammal, for inhibiting
XX MDC-induced activation, chemotaxis or proliferation of cells that
XX express CCR4, for inhibiting or palliating an allergic reaction in
XX a mammal, and for treating asthma.
XX Sequence 93 AA;
Query Match 97.4%; Score 446; DB 20; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.7e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQALLVLLVLLVAQLQATGAGPYGANMEDSVCCRDYRRLPLXVYVXHFWTSDSC 60
DB 1 MARLQALLVLLVLLVAQLQATGAGPYGANMEDSVCCRDYRRLPLXVYVXHFWTSDSC 60

QY 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQS 93
DB 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQS 93
RESULT 4
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX AC AAW20058;
XX 11-SEP-1997 (first entry)
XX Macrophage derived chemokine for treating inflammation.
XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
XX rheumatoid arthritis; chemotaxis; fibroblast proliferation;
XX wound healing; angiogenesis; inflammation.
XX Homo sapiens.
XX Key Location/Qualifiers
FT Peptide 1..24
FT Protein /label= sig_peptide
FT 25..93
FT /label= mat_protein
XX WO9640923-A1.
XX 19-DEC-1996.
XX 07-JUN-1996; 96WO-US10114.
XX 16-NOV-1995; 95US-0558658.
XX 07-JUN-1995; 95US-0479620.
XX (ICOS-) ICOS CORP.
XX Godiska R, Gray PW;
XX WPI; 1997-052324/05.
XX N-PSDB; AAT76529.
XX Macrophage derived chemokine (MDC) and analogues - used in the
XX treatment of inflammatory diseases, MDC antibodies used to treat
XX Crohn's disease, rheumatoid arthritis, etc.
XX Claim 1; Page 73; 106pp; English.
XX A new macrophage derived chemokine, MDC, a member of the C-C
XX (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
XX analogues may be used in the treatment of inflammatory diseases
XX especially diseases characterised by monocyte chemotaxis towards a
XX site of inflammation. MDC and its analogues also induce fibroblast
XX proliferation having a positive effect in wound healing and
XX angiogenesis. They may prove to be clinically important in the
XX treatment of tumours, by directly or indirectly inhibiting tumour
XX formation. Antibodies directed against MDC and its analogues may be
XX used in the treatment of Crohn's disease, rheumatoid arthritis and
XX atherosclerosis. Probes and/or primers for the identification of MDC
XX encoding sequences can be derived from MDC encoding sequences.
XX Sequence 93 AA;
Query Match 97.2%; Score 445; DB 18; Length 93;
Best Local Similarity 93.5%; Pred. No. 3.7e-51;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 1 MARLQALLVLLVLLVAQLQATGAGPYGANMEDSVCCRDYRRLPLXVYVXHFWTSDSC 60
DB 1 MARLQALLVLLVLLVAQLQATGAGPYGANMEDSVCCRDYRRLPLXVYVXHFWTSDSC 60
QY 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQS 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 5

AAW62783
ID AAW62783 standard; Protein: 93 AA.

AC AAW62783;

DT 24-SEP-1998 (first entry)

DE Amino acid sequence of human STCP-1.

KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
KW joint inflammation; rheumatoid arthritis; lupus.

OS Homo sapiens.

PN WO9824907-A1.

PD 11-JUN-1998.

PF 26-NOV-1997; 97WO-US21552.

PR 03-DEC-1996; 96US-0760127.

PA (AMGE-) AMGEN INC.

PI Andrew DP, Chang M;

DR WPI: 1998-333326/29.

DR N-PSDB; AAV38933.

PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
PT treat HIV infection or other viral or bacterial pathogens infecting
PT T-cells, macrophages or other immune system cells

PS Claim 1; Fig 2A-F; 96pp; English.

CC The present sequence represents human STCP-1. STCP-1 polypeptides
CC demonstrate chemokine activity for T-cells. The polypeptides are useful
CC prophylactically or therapeutically to treat HIV infection and other
CC conditions associated with viral/bacterial pathogens infecting T-cells,
CC macrophages or other immune system cells. They can be included
CC (optionally chemically modified) with a pharmaceutically acceptable
CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
CC in therapeutic compositions for treating these conditions. STCP-1 also
CC useful to assay for inhibitory compounds used to reduce circulatory
CC system STCP-1 levels to alleviate e.g. joint inflammation associated
CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
CC polypeptides are also useful to prepare antibodies or hybridomas. The
CC nucleic acids are useful to produce hybridisation probes to test for
CC STCP-1 DNA/RNA in mammalian samples.

SQ Sequence 93 AA;

Query Match 97.2%; Score 445; DB 19; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60

Db 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 6

AAW59433

ID AAW59433 standard; Protein: 93 AA.

AC AAW59433;

DT 27-AUG-1998 (first entry)

DE Human chemokine protein 331D5.

KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
KW degenerative condition; abnormal proliferation; regeneration;
KW degeneration; atrophy.

OS Homo sapiens.

PH Key Location/Qualifiers

FT Peptide 1..24

FT /label= signal

FT Protein 25..93

FT /label= 331D5

FT /note= "chemokine protein"

PN WO9811226-A2.

PD 19-MAR-1998.

PF 09-SEP-1997; 97WO-US15315.

PR 10-SEP-1996; 96US-0025724.

PA (SCHE) SCHERING CORP.

PI Gorman DM, Hedrick JA, Zlotnik A;

DR WPI: 1998-207387/18.

DR N-PSDB; AAV34997.

PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions

PS Claim 1; Page 78; 82pp; English.

CC This sequence represents a novel human chemokine protein, 331D5.
CC Nucleic acid sequences encoding the chemokines can be used for detection,
CC in e.g. forensic techniques. Antibodies and other binding agents may be
CC used in diagnostics. The chemokines themselves are useful for treatment
CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
CC regeneration, degeneration or atrophy may be treated by the inventive
CC compositions.

SQ Sequence 93 AA;

Query Match 97.2%; Score 445; DB 19; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60

Db 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 7

AAW40811

ID AAW40811 standard; Protein: 93 AA.

AC AAW40811;

DT 01-APR-1998 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.
 XX Homo sapiens.
 OS
 FH Key
 FT Peptide
 FT 1..24 Location/Qualifiers
 FT /note= "leader peptide"
 FT Protein
 FT 25..93
 FT /note= "mature protein"
 XX
 PN US5688927-A.
 PD 18-NOV-1997.
 XX
 PF 07-JUN-1995; 95US-0480449.
 XX
 PR 07-JUN-1995; 95US-0480449.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1998-008038/01.
 DR N-PSDB; AAT99233.
 XX
 PT Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity
 XX
 PS Claim 3; Column 21-24; 22pp; English.
 XX
 CC This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting
 CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.
 XX
 SQ Sequence 93 AA;
 Query Match 97.2%; Score 445; DB 19; Length 93;
 Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXHFXTSDSC 60
 DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLKLSQ 93
 DB 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLKLSQ 93
 RESULT 8
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 AC AAY26175;
 XX
 DT 29-SEP-1999 (first entry)
 XX
 DE Macrophage-derived chemokine.
 KW Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 OS Homo sapiens.
 XX

FH Key
 FT Peptide
 FT 1..24 Location/Qualifiers
 FT /note= "signal peptide"
 FT Protein
 FT 25..93
 FT /note= "mature macrophage-derived chemokine"
 XX
 PN W09929728-A1.
 PD 17-JUN-1999.
 XX
 PF 11-DEC-1998; 98WO-US26291.
 XX
 PR 11-DEC-1997; 97US-0069281.
 XX
 PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A;
 XX
 DR WPI; 1999-385578/32.
 DR N-PSDB; AAX80630.
 XX
 PT Methods of enhancing vaccine efficacy
 XX
 PS Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 XX
 CC The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used
 CC to treat microbial diseases especially HIV.
 XX
 SQ Sequence 93 AA;
 Query Match 97.2%; Score 445; DB 20; Length 93;
 Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXHFXTSDSC 60
 DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLKLSQ 93
 DB 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLKLSQ 93
 RESULT 9
 AAY24414
 ID AAY24414 standard; Protein; 93 AA.
 XX
 AC AAY24414;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Human macrophage derived chemokine.
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 XX
 FH Key
 FT Peptide
 FT 1..24 Location/Qualifiers
 FT /label= signal
 FT Protein
 FT 25..93

FT XX W09914237-A1. for in claim 19"

PN XX 25-MAR-1999.

XX XX 16-SEP-1998; 98WO-US19450.

XX XX 16-SEP-1997; 97US-0931764.

XX XX (ALKU) AKZO NOBEL NV.

XX XX Devico AL, Gallo RC, Garzino-Demo A, Markham PD;

PI PI Pal R;

XX XX WPI: 1999-244024/20.

DR DR N-PSDB; AAX32817.

XX XX Treatment or prevention of lentivirus, particularly HIV infection

XX XX Claim 16; Page 97-98; 103pp; English.

XX XX This represents a human macrophage derived chemokine (MDC). The

CC CC invention provides a novel method of treating or preventing lentivirus

CC CC (LV) infection or replication in a human subject, that comprises

CC CC administering to the subject a composition comprising MDC or a derivative

CC CC of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The

CC CC products can be used for treating or preventing LV infection or

CC CC replication, particularly HIV infection or replication. The products can

CC CC also be used for the prognosis for a LV infection, particularly an HIV

CC CC infection using the MDC as a prognostic indicator. The methods can also

CC CC be used with other LVs, e.g. simian immunodeficiency virus, feline

CC CC immunodeficiency virus and bovine immunodeficiency virus.

XX XX Sequence 93 AA;

SQ Query Match 97.2%; Score 445; DB 20; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILKLSQ 93

DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILKLSQ 93

RESULT 12

AAB07500

ID AAB07500 standard; Protein; 93 AA.

AC AAB07500;

XX XX 20-OCT-2000 (first entry)

XX XX A human monokine derived chemokine.

XX XX Systemic memory T cell; CCR4; TARC; integrin dependent arrest;

KW KW thymus and activation-regulated chemokine; vascular receptor;

KW KW MDC; monokine derived chemokine; adhesion trigger; inflammation.

XX XX Homo sapiens.

XX XX W0200041724-A1.

XX XX 20-JUL-2000.

XX XX 14-JAN-2000; 2000WO-US00953.

XX XX 15-JAN-1999; 99US-0232878.

XX XX

PA (STRD) UNIV LELAND STANFORD JUNIOR.

PA PA (LEUK-) LEUKOSITE INC.

PI PI Butcher EC, Campbell JJ, Wu L, Rottman JB;

XX XX WPI: 2000-475957/41.

DR DR N-PSDB; AAA58874.

XX XX Modulating the trafficking of systemic memory T cells in mammals by

PT PT administering a CCR4 modulating agent, useful for the treatment of

PT PT inflammation

XX XX Disclosure; Page 38; 39pp; English.

XX XX The specification describes a method of modulating the trafficking of

CC CC systemic memory T cells in a mammalian host. The method comprises

CC CC administering a CCR4 modulating agent. It has been found that systemic

CC CC T cells such as express high levels of CCR4. Ligands of CCR4 such as

CC CC TARC (thymus and activation-regulated chemokine) and MDC (monokine

CC CC derived chemokine) act as an adhesion trigger and, upon CCR4 binding,

CC CC these cells undergo integrin dependent arrest to the appropriate

CC CC vascular receptors. This arrest acts to localize the cells at the

CC CC target site. The method modulates this triggering and CCR4 mediated

CC CC chemotaxis to affect the localization of T cells in targeted tissues.

CC CC The active agent may be a CCR4 agonist that acts to enhance T cell

CC CC localization. Alternatively, it may be an antagonist that blocks CCR4

CC CC biological activity. A CCR4 antagonist may be administered for the

CC CC treatment of inflammation. The present sequence represents a human MDC.

XX XX Sequence 93 AA;

SQ Query Match 97.2%; Score 445; DB 21; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILKLSQ 93

DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILKLSQ 93

RESULT 13

RAO14046

ID AAO14046 standard; Protein; 93 AA.

XX XX AAO14046;

AC AAO14046;

XX XX 08-MAY-2002 (first entry)

XX XX Human macrophage-derived C-C chemokine (MDC).

XX XX Human; macrophage-derived C-C chemokine; MDC; Immune system;

KW KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;

KW KW infection; inflammation; macrophage; Crohn's disease;

KW KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;

KW KW chemotherapy; radiation therapy; tumour.

XX XX Homo sapiens.

OS XX Location/Qualifiers

PH Key 1..24

FT Peptide /note= "Signal peptide"

FT Protein 25..93

FT FT /note= "Mature macrophage-derived C-C chemokine, this is

FT FT a specifically claimed region"

FT FT Misc-difference 25..39

FT FT /note= "Specifically claimed region"

XX XX US6320023-B1.

XX XX

PD 20-NOV-2001.
 XX PF 07-JUN-1995; 95US-0479603.
 XX PR 07-JUN-1995; 95US-0479603.
 XX PA (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 2002-074410/10.
 DR N-PSDB; AAK98372.
 XX
 PT Macrophage derived C-C chemokines useful in medical imaging and for the
 PT development of agents for controlling inflammation
 XX
 PS Claim 1; Fig 1; 22pp; English.
 XX
 CC The present sequence represents a novel human macrophage-derived C-C
 CC chemokine (MDC) of the invention. Chemokines comprise a family of small
 CC secreted proteins which attract and activate leukocytes, thereby aiding
 CC in the stimulation and regulation of the immune system. C-C cytokines are
 CC a subfamily known to activate monocytes, causing calcium flux and
 CC chemotaxis. The invention comprises a novel human MDC protein and nucleic
 CC acids, as well as methods for the production of the MDC protein. The MDC
 CC of the invention is useful in medical imaging (e.g. for imaging sites of
 CC infection, inflammation, and other sites having C-C chemokine receptor
 CC molecules. Inhibition of MDC is believed to be useful in treating
 CC diseases involving macrophages (e.g. Crohn's disease, rheumatoid
 CC arthritis or atherosclerosis). Alternatively, augmenting the effects of
 CC MDC is believed to be beneficial towards wound healing and angiogenesis.
 CC Also MDC or MDC agonists may be beneficial to patients receiving
 CC chemotherapy or radiation therapy and in the treatment of tumours.
 XX
 SQ Sequence 93 AA;
 Query Match 97.2%; Score 445; DB 23; Length 93;
 Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLQATLLVLLVLLAVLQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 DB 1 MARLQATLLVLLVLLAVLQATGAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 DB 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 RESULT 14
 ID AAW07604
 XX AAW07604 standard; Protein; 93 AA.
 AC AAW07604;
 XX
 DT 03-SEP-1997 (first entry)
 XX
 DE Cytokine beta-13 stimulates migration/activation of immune cells.
 XX
 KW Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 KW defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 KW T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 KW Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 KW leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 KW rheumatoid arthritis; silicosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 45
 FT /note= "given as encoded by CAC codon in AAT44026"
 XX
 PN W09639521-A1.

XX 12-DEC-1996.
 PD
 XX 06-JUN-1995; 95WO-US07294.
 PF
 XX 06-JUN-1995; 95WO-US07294.
 PR
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 PA
 XX Li H, Seibel G;
 PI
 XX WPI; 1997-043143/04.
 DR N-PSDB; AAT44026.
 DR
 XX Human chemokine beta-13 - useful for treating solid tumours,
 PT leukaemia, infections, autoimmune disease, fibrotic disorders,
 PT psoriasis, etc.
 PT
 PS Claim 10; Page 46; 58pp; English.
 PS
 XX AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 CC C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 CC treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 CC stimulates the invasion and activation of host defence cells making it
 CC useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 CC enhancing resistance to acute and chronic infections, e.g. mycobacterial
 CC infections. The chemokine induces chemotactic migration of monocytes,
 CC neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 CC sites where they are needed. Eosinophils may be attracted to the site
 CC of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 CC recruits debris-clearing and connective tissue promoting inflammatory
 CC cells, and is therefore used to stimulate wound healing, prevent
 CC scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 CC fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 CC mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and
 CC to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 CC chemokine which is useful for treating certain autoimmune diseases,
 CC atherosclerosis, chronic inflammatory and infective diseases, allergic
 CC reactions, rheumatoid arthritis, silicosis and bone marrow failure.
 XX
 SQ Sequence 93 AA;
 Query Match 96.1%; Score 440; DB 18; Length 93;
 Best Local Similarity 92.5%; Pred. No. 1.7e-50;
 Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLQATLLVLLVLLAVLQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 DB 1 MARLQATLLVLLVLLAVLQATGAGPYGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 DB 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 RESULT 15
 ID AAW57881
 XX AAW57881 standard; Protein; 93 AA.
 AC AAW57881;
 XX
 DT 23-SEP-1998 (first entry)
 XX
 DE Human chemokine beta-13.
 XX
 KW Chemokine beta-13; human; Ckbeta-13; immune system-related disorder;
 KW tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 KW autoimmune disease; bone marrow stem cell colony formation inhibitor;
 KW haematopoiesis regulator; therapy.
 XX
 OS Homo sapiens.
 XX

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 ; Search time 7.81513 Seconds
(without alignments)
350.133 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQALLVLLVALQ.....XICADPRVPPXXMKLNKLSL 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2.6/ptodata/1/1aa/5A-COMB.pep:*
2: /cgn2.6/ptodata/1/1aa/5B-COMB.pep:*
3: /cgn2.6/ptodata/1/1aa/6A-COMB.pep:*
4: /cgn2.6/ptodata/1/1aa/6B-COMB.pep:*
5: /cgn2.6/ptodata/1/1aa/PTUS-COMB.pep:*
6: /cgn2.6/ptodata/1/1aa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	446	97.4	93	2	US-08-660-542-25
2	445	97.2	93	1	US-08-480-449-2
3	445	97.2	93	2	US-08-660-542-2
4	445	97.2	93	4	US-09-232-878-6
5	445	97.2	93	4	US-08-479-603-2
6	445	97.2	93	5	PCF-US95-07294-2
7	343	74.9	69	2	US-08-660-542-31
8	342	74.7	70	2	US-08-660-542-30
9	322	70.3	69	2	US-08-660-542-32
10	139	30.3	89	1	US-08-208-339A-4
11	139	30.3	89	3	US-08-722-719-6
12	137	29.9	78	1	US-08-375-346A-6
13	137	29.9	78	2	US-08-467-123B-6
14	137	29.9	89	4	US-09-334-951-6
15	127	27.7	95	4	US-09-230-637-26
16	123	26.9	70	4	US-09-334-951-65
17	121.5	26.5	91	1	US-08-480-449-21
18	121.5	26.5	91	2	US-08-660-542-21
19	121.5	26.5	91	4	US-08-679-493A-155
20	121.5	26.5	91	4	US-08-479-603-21
21	120.5	26.3	90	4	US-09-230-637-40
22	120.5	26.3	91	1	US-08-347-492B-12
23	120.5	26.3	91	1	US-08-375-346A-5
24	120.5	26.3	91	2	US-08-633-682-3
25	120.5	26.3	91	2	US-08-421-144A-8
26	120.5	26.3	91	2	US-08-798-143-12
27	120.5	26.3	91	2	US-08-467-123B-5

28	120.5	26.3	91	3	US-08-936-772-3	Sequence 3, Appl
29	120.5	26.3	91	4	US-08-836-922-14	Sequence 14, Appl
30	120.5	26.3	91	4	US-09-395-918-3	Sequence 3, Appl
31	120.5	26.3	91	4	US-09-230-371A-25	Sequence 25, Appl
32	119	26.0	93	1	US-08-173-209A-2	Sequence 2, Appl
33	119	26.0	93	1	US-08-347-492B-6	Sequence 6, Appl
34	119	26.0	93	2	US-08-798-143-6	Sequence 6, Appl
35	119	26.0	93	3	US-08-722-719-2	Sequence 2, Appl
36	119	26.0	93	4	US-09-180-077-7	Sequence 7, Appl
37	119	26.0	93	4	US-09-334-951-2	Sequence 2, Appl
38	119	26.0	93	5	PCF-US95-15484-6	Sequence 6, Appl
39	117	25.5	91	2	US-08-633-682-5	Sequence 5, Appl
40	117	25.5	91	3	US-08-936-772-5	Sequence 5, Appl
41	117	25.5	91	4	US-09-395-918-5	Sequence 5, Appl
42	117	25.5	91	4	US-08-679-493A-156	Sequence 156, App
43	117	25.5	94	4	US-09-230-371A-21	Sequence 21, Appl
44	115.5	25.2	92	1	US-07-792-988-2	Sequence 2, Appl
45	115.5	25.2	92	1	US-08-347-492B-11	Sequence 11, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-25
: Sequence 25, Application US/08660542
: Patent No. 5932703
: GENERAL INFORMATION:
: APPLICANT: Godiska, Ronald
: APPLICANT: Gray, Patrick W.
: TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
: TITLE OF INVENTION: ANALOGS
: NUMBER OF SEQUENCES: 32
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
: STREET: 6300 Sears Tower, 233 South Wacker Drive
: CITY: Chicago
: STATE: Illinois
: COUNTRY: United States of America
: ZIP: 60606-6402
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION NUMBER: US/08/660,542
: FILING DATE:
: CLASSIFICATION: 514
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/558,658
: FILING DATE: 16-NOV-1995
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/479,620
: FILING DATE: 07-JUN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: Gass, David A.
: REGISTRATION NUMBER: 38,153
: REFERENCE/DOCKET NUMBER: 27866/33318
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 312/474-6300
: TELEFAX: 312/474-0448
: TELEX: 25-3856
: INFORMATION FOR SEQ ID NO: 25:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 93 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
: FEATURE:
: NAME/KEY: Protein
: LOCATION: 1..69

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STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,449
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32779
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-480-449-2

Query Match 97.2%; Score 445; DB 1; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTLALVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXMTSDSC 60
Ddb 1 MARLQTLALVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXMTSDSC 60
QY 61 PRPGVLLTFRDKXCICADPRVPXXKMILNKLSQ 93
Ddb 61 PRPGVLLTFRDKXCICADPRVPWVKMILNKLSQ 93

RESULT 3
US-08-660-542-2
Sequence 2, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSER: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

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; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-660-542-2

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXVHXFXTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXVHXFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 4
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, LiJan
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
; US-09-232-878-6

Query Match 97.2%; Score 445; DB 4; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXVHXFXTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXVHXFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 5
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:

```

```

; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-603-2

Query Match 97.2%; Score 445; DB 4; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXVHXFXTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXVHXFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 6
PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.

```

REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-356
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 AMINO ACIDS

TYPE: AMINO ACID

STRANDEDNESS:

TOPOLOGY: LINEAR

MOLECULE TYPE: PROTEIN

PCT-US95-07294-2

Query Match 97.2%; Score 445; DB 5; Length 93;

Best Local Similarity 93.5%; Pred. No. 1.7e-52;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQTALLVLLVAVALQATAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60

Db 1 MARLQTALLVLLVAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSC 60

Qy 61 PRGCVLLTFRDXKICADPRVXXKMILNLSQ 93

Db 61 PRGCVLLTFRDXKICADPRVXXKMILNLSQ 93

RESULT 7

US-08-660-542-31

Sequence 31, Application. US/08660542

Patent No. 5932703

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

TITLE OF INVENTION: ANALOGS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,542

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/558,658

FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/33318

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 31:

SEQUENCE CHARACTERISTICS:

LENGTH: 69 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-660-542-31

Query Match 74.9%; Score 343; DB 2; Length 69;

Best Local Similarity 91.3%; Pred. No. 5.9e-39;

Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 25 GPGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSCPRGCVLLTFRDXKICADPRVXX 84

Db 1 GPGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDXKICADPRVYL 60

Qy 85 KMILNLSQ 93

Db 61 KMILNLSQ 69

RESULT 8

US-08-660-542-30

Sequence 30, Application US/08660542

Patent No. 5932703

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

TITLE OF INVENTION: ANALOGS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,542

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/558,658

FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/33318

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 30:

SEQUENCE CHARACTERISTICS:

LENGTH: 70 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-660-542-30

Query Match 74.7%; Score 342; DB 2; Length 70;

Best Local Similarity 91.3%; Pred. No. 8.2e-39;

Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 25 GPGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSCPRGCVLLTFRDXKICADPRVXX 84

Db 2 GPGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDXKICADPRVWY 61

QY 85 KMILNLSQ 93
Db 62 KMILNLSQ 70

RESULT 9

US-08-660-542-32
; Sequence 32, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-32

Query Match 70.3%; Score 322; DB 2; Length 69;
Best Local Similarity 87.0%; Pred. No. 3.9e-36;
Matches 60; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 25 GPYGAMDSVCCRDYVRYRLPLXVYVHXFWTSDSCPRGCVLLTFRDKXICADPRVPXX 84
Db 1 GPYGAMDSVCCRDYVRYRLPLRVVKEYFTSDSCPRGCVLLTFRDKXICADPRVPW 60
QY 85 KMILNLSQ 93
Db 61 KMILNLSQ 69

RESULT 10

US-08-208-339A-4
; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.

; TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/208,339A
; FILING DATE: 8 MARCH 1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-77
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-208-339A-4

Query Match 30.3%; Score 139; DB 1; Length 89;
Best Local Similarity 38.0%; Pred. No. 2e-11;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARLQATLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHXFWTSDSC 60
Db 1 MRGLAALLVLCVTALC----SCAQVGTKNE--LCCLVYTSWQIPQKFTVDYSETSPQC 54
QY 61 PRGCVLLTFRDKXICADP 79
Db 55 PRGCVLLTFRDKXICADP 73

RESULT 11

US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.

; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; TITLE OF INVENTION: FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:

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; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-722-719-6

Query Match 30.3%; Score 139; DB 3; Length 89;
Best Local Similarity 38.0%; Pred. No. 2e-11;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARQTALVVLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVVXHFXTSDSC 60
Db 1 MKGLAALLVLCVTWALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54

QY 61 PRPGVLLTFRKXICADP 79
Db 55 PRPGVLLTKRGQICADP 73

RESULT 12
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Sellhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: IBM Compatible
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/467,123B
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375,346
; FILING DATE: 19-JAN-1995
; ATTORNEY/AGENT INFORMATION:

; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; US-08-375-346A-6

Query Match 29.9%; Score 137; DB 1; Length 78;
Best Local Similarity 38.2%; Pred. No. 3.2e-11;
Matches 29; Conservative 13; Mismatches 28; Indels 6; Gaps 2;

QY 4 LQTALLVVLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVVXHFXTSDSCPRP 63
Db 2 LAALLVLCVTWALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPRP 55

QY 64 GVLLTFRKXICADP 79
Db 56 GVLLTFRKRGQICADP 71

RESULT 13
US-08-467-123B-6
; Sequence 6, Application US/08467123B
; Patent No. 5945506
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig C.
; APPLICANT: Sellhamer, Jeffrey J.
; TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,123B
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375,346
; FILING DATE: 19-JAN-1995
; ATTORNEY/AGENT INFORMATION:
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; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-555-0555
; TELEFAX: 415-845-4166
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-467-123B-6

Query Match      29.9%; Score 137; DB 2; Length 78;
Best Local Similarity 38.2%; Pred. No. 3.2e-11;
Matches 29; Conservative 13; Mismatches 28; Indels 6; Gaps 2;

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Db 2 LAALVLLVCTMALC-----SCAQVGINK-----LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
   | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Qy 64 GVLLTFRDXKICADP 79
   | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 56 GVILLTKRGQICADP 71
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RESULT 14
US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: Polynucleotides and Polypeptides (As Amended)
; FILE REFERENCE: 1488.033000B
; CURRENT APPLICATION NUMBER: US/09/334,951
; CURRENT FILING DATE: 1999-06-17
; EARLIER APPLICATION NUMBER: US 08/208,339
; EARLIER FILING DATE: 1994-03-08
; EARLIER APPLICATION NUMBER: US 08/446,881
; EARLIER FILING DATE: 1995-05-05
; EARLIER APPLICATION NUMBER: US 08/465,682
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/722,719
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-6
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Query Match      29.9%; Score 137; DB 4; Length 89;
Best Local Similarity 38.0%; Pred. No. 3.8e-11;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

Qy 1 MARLQATLLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHXFWTSDSC 60
   | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 1 MKGLAALLVLTCTMALC-----SCAQVGTKNE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
   | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Qy 61 PRPGVLLTFRDXKICADP 79
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Db 55 PKPGVLLTFRDXKICADP 73
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RESULT 15
US-09-230-637-26

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; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary
; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
; FILE REFERENCE: Associated Herpesvirus
; CURRENT APPLICATION NUMBER: US/09/230,637
; CURRENT FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 60/022,591
; PRIOR FILING DATE: 1996-07-25
; PRIOR APPLICATION NUMBER: PCT US 97/12931
; PRIOR FILING DATE: 1997-07-24
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 95
; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
US-09-230-637-26

Query Match      27.7%; Score 127; DB 4; Length 95;
Best Local Similarity 29.7%; Pred. No. 9.1e-10;
Matches 27; Conservative 21; Mismatches 43; Indels 0; Gaps 0;

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Qy 61 PRPGVLLTFRDXKICADPRVXXXKMLINKL 91
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GenCore version 5.1.6
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OM protein - protein search, using sw model

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(without alignments)
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Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQTAALLVLLVLAVALQ.....XICADPRVPXKXMKLNLSQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 118759770 residues
Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*

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- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pap.*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pap.*
- 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pap.*
- 5: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pap.*
- 6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pap.*
- 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pap.*
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- 10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pap1.*
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- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pap3.*
- 13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pap.*
- 14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pap.*
- 15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pap.*
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- 17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	445	97.2	93	10 US-09-837-446-6	Sequence 6, Appli
2	445	97.2	93	11 US-09-811-088-2	Sequence 2, Appli
3	445	97.2	93	15 US-10-314-410-2	Sequence 2, Appli
4	440	96.1	93	10 US-09-908-599-2	Sequence 2, Appli
5	440	96.1	93	10 US-09-908-600-2	Sequence 2, Appli
6	231	50.4	68	15 US-10-001-221A-3	Sequence 3, Appli
7	193	42.1	37	10 US-09-864-761-43730	Sequence 43730, A
8	177.5	38.8	67	15 US-10-001-221A-7	Sequence 7, Appli
9	139	30.3	89	10 US-09-334-923A-6	Sequence 6, Appli
10	139	30.3	89	10 US-09-334-923A-6	Sequence 6, Appli
11	139	30.3	89	10 US-09-334-923A-6	Sequence 6, Appli
12	137	29.9	78	15 US-09-925-302-792	Sequence 792, App
13	132	28.8	89	10 US-10-158-366-6	Sequence 6, Appli
14	132	28.8	89	10 US-09-834-795A-34	Sequence 34, Appli
15	125	27.3	69	12 US-09-834-794A-34	Sequence 34, Appli
16	124	27.1	78	15 US-09-792-793A-28	Sequence 28, Appli
				15 US-10-001-221A-6	Sequence 6, Appli

17	123	26.9	70	10 US-09-334-923A-65	Sequence 65, Appl
18	123	26.9	70	10 US-09-334-954A-65	Sequence 65, Appl
19	120.5	26.3	91	8 US-08-927-939-21	Sequence 21, Appl
20	120.5	26.3	91	10 US-09-144-838-9	Sequence 9, Appli
21	120.5	26.3	91	10 US-09-834-795A-29	Sequence 29, Appl
22	120.5	26.3	91	12 US-09-834-794A-29	Sequence 8, Appli
23	120.5	26.3	91	12 US-09-920-137A-8	Sequence 1, Appli
24	120.5	26.3	91	12 US-09-537-858-1	Sequence 5, Appli
25	120.5	26.3	91	15 US-10-158-366-5	Sequence 8, Appli
26	120.5	26.3	91	15 US-10-057-275-8	Sequence 12, Appl
27	120.5	26.3	91	15 US-10-293-705-12	Sequence 86, Appl
28	119	26.0	87	15 US-10-153-064-86	Sequence 48, Appl
29	119	26.0	93	8 US-08-927-939-48	Sequence 2, Appli
30	119	26.0	93	10 US-09-334-923A-2	Sequence 30, Appl
31	119	26.0	93	10 US-09-834-795A-30	Sequence 2, Appli
32	119	26.0	93	10 US-09-334-954A-2	Sequence 30, Appl
33	119	26.0	93	12 US-09-834-794A-30	Sequence 5, Appli
34	119	26.0	93	12 US-09-372-348-5	Sequence 6, Appli
35	119	26.0	93	12 US-09-372-348-6	Sequence 7, Appli
36	119	26.0	93	12 US-09-372-348-7	Sequence 2, Appli
37	119	26.0	93	15 US-10-153-064-2	Sequence 6, Appli
38	119	26.0	93	15 US-10-293-705-6	Sequence 4, Appli
39	119	26.0	143	12 US-09-372-348-4	Sequence 6, Appli
40	117	25.5	73	10 US-09-144-838-6	Sequence 3, Appli
41	116	25.3	71	10 US-09-144-838-3	Sequence 20, Appl
42	115.5	25.2	92	8 US-08-927-939-20	Sequence 31, Appl
43	115.5	25.2	92	10 US-09-834-795A-31	Sequence 31, Appl
44	115.5	25.2	92	12 US-09-834-794A-31	Sequence 7, Appli
45	115.5	25.2	92	12 US-09-920-137A-7	

ALIGNMENTS

RESULT 1
US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US2002019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 97.2%; Score 445; DB 10; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Qy	61	PRGVVLLTFRDKKICADPRVPXKXMKLNLSQ 93
Db	61	PRGVVLLTFRDKKICADPRVPXKXMKLNLSQ 93

RESULT 2
US-09-811-088-2

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; Sequence 2, Application US/09811088
; Patent No. US2002016046A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match          97.2%; Score 445; DB 11; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16
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; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          97.2%; Score 445; DB 15; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PFI77P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match          96.1%; Score 440; DB 10; Length 93;
Best Local Similarity 92.5%; Pred. No. 1.9e-48;
Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,
```

STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICANT: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIORITY APPLICATION DATA:
FILING DATE: 09/484,221
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-908-600-2

Query Match 96.1%; Score 440; DB 10; Length 93;
Best Local Similarity 92.5%; Pred. No. 1.9e-48;
Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||

Qy 61 PRPGVLLTFRDKXICADPRVPXXKMILKLSQ 93
|||||
Db 61 PRPGVLLTFRDKXICADPRVPXXKMILKLSQ 93
|||||

RESULT 6

US-10-001-221A-3
Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 68
TYPE: PRT
ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 50.4%; Score 231; DB 15; Length 68;
Best Local Similarity 58.8%; Pred. No. 4.7e-22;
Matches 40; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 25 GPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSCPRPGVLLTFRDKXICADPRVPXX 84
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Db 1 GPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSCPRPGVLLTFRDKXICADPRVPXX 60

Qy 85 KMILNKLS 92
I :|||
Db 61 KKLHLKLS 68

RESULT 7

US-09-864-761-43730
Sequence 43730, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aecomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annonmax Sequence Listing Engine vers. 1.1
SEQ ID NO 43730
LENGTH: 37
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC004382.1
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: EST_HUMAN HIT: W61220.1, EVALUE 8.50e-01
OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUE 3.00e-18
US-09-864-761-43730

SEQ ID NO 792
LENGTH: 97
TYPE: PRT
ORGANISM: Homo sapiens
US-09-925-302-792

Query Match 30.3%; Score 139; DB 10; Length 97;
Best Local Similarity 38.0%; Pred. No. 3.4e-10;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARLOTALLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60
Db 9 MKGLAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 62
QY 61 PRPGVLLTFRDKKICADP 79
Db 63 PKPGVLLTKRGRQICADP 81

RESULT 12

US-10-158-366-6
Sequence 6, Application US/10158366
Publication No. US20020142398A1
GENERAL INFORMATION:
APPLICANT: Coleman, Roger
 Wilde, Craig C.
 Sellhammer, Jeffrey J.
TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
 ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/158,366
FILING DATE: 29-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILING DATE: 08-JUN-1995
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-10-158-366-6

Query Match 29.9%; Score 137; DB 15; Length 78;
Best Local Similarity 38.2%; Pred. No. 4.8e-10;
Matches 29; Conservative 13; Mismatches 28; Indels 6; Gaps 2;

QY 4 LQTLALLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSCPRP 63

Db 2 LAAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPRP 55
QY 64 GVLLTFRDKKICADP 79
Db 56 GVLLTKRGRQICADP 71

RESULT 13

US-09-834-795A-34
Sequence 34, Application US/09834795A
Patent No. US20020076710A1
GENERAL INFORMATION:
APPLICANT: Lawrence, Papsidero
APPLICANT: Lyn, Dyster
APPLICANT: Jana, Frustaci
TITLE OF INVENTION: Detection and Treatment of Breast Cancer
FILE REFERENCE: 3380/11127-US3
CURRENT APPLICATION NUMBER: US/09/834,795A
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 09/146,580
PRIOR FILING DATE: 1998-09-03
PRIOR APPLICATION NUMBER: 60/071,899
PRIOR FILING DATE: 1998-01-20
PRIOR APPLICATION NUMBER: 60/092,155
PRIOR FILING DATE: 1998-07-09
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.0
SEQ ID NO 34
LENGTH: 89
TYPE: PRT
ORGANISM: Homo sapiens
US-09-834-795A-34

Query Match 28.8%; Score 132; DB 10; Length 89;
Best Local Similarity 36.7%; Pred. No. 2.4e-09;
Matches 29; Conservative 13; Mismatches 31; Indels 6; Gaps 2;

QY 1 MARLOTALLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60
Db 1 MKGLAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
QY 61 PRPGVLLTFRDKKICADP 79
Db 55 PKPGVLLTKRGRQICADP 73

RESULT 14

US-09-834-794A-34
Sequence 34, Application US/09834794A
Publication No. US20030026777A1
GENERAL INFORMATION:
APPLICANT: Lawrence, Papsidero
APPLICANT: Lyn, Dyster
APPLICANT: Jana, Frustaci
TITLE OF INVENTION: Detection and Treatment of Breast Cancer
FILE REFERENCE: 3380/11127-US4
CURRENT APPLICATION NUMBER: US/09/834,794A
CURRENT FILING DATE: 2001-04-13
PRIOR APPLICATION NUMBER: 09/146,580
PRIOR FILING DATE: 1998-09-03
PRIOR APPLICATION NUMBER: 60/071,899
PRIOR FILING DATE: 1998-01-20
PRIOR APPLICATION NUMBER: 60/092,155
PRIOR FILING DATE: 1998-07-09
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.0
SEQ ID NO 34
LENGTH: 89
TYPE: PRT
ORGANISM: Homo sapiens
US-09-834-794A-34

Search completed: July 28, 2003, 04:20:04
Job time : 12.6996 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 106.676 Seconds
(without alignments)
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Title: US-09-509-165A-25
Perfect score: 458
Sequence: 1 MARLOTALLVLLVALQ.....XICADPRVPPXXKMLNKLQS 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
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Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: /cgn2_6/ptodata/1/paa/US06_COMB.pep.*
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11: /cgn2_6/ptodata/1/paa/US087_COMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	446	97.4	93	9	US-08-558-658-25
2	446	97.4	93	13	US-08-939-107-25
3	446	97.4	93	14	US-09-067-447-25
4	446	97.4	93	14	US-09-067-447-25
5	446	97.4	93	14	US-09-067-447B-25
6	446	97.4	93	19	US-09-509-165A-25

7	445	97.2	93	1	PCT-US00-00953-6	Sequence 6, Appli
8	445	97.2	93	8	US-08-464-594-2	Sequence 2, Appli
9	445	97.2	93	8	US-08-479-620-2	Sequence 2, Appli
10	445	97.2	93	9	US-08-558-658-2	Sequence 2, Appli
11	445	97.2	93	11	US-08-760-127-3	Sequence 3, Appli
12	445	97.2	93	12	US-08-820-364-2	Sequence 2, Appli
13	445	97.2	93	13	US-08-925-857-12	Sequence 12, Appli
14	445	97.2	93	13	US-08-931-764-2	Sequence 2, Appli
15	445	97.2	93	13	US-08-931-764B-2	Sequence 2, Appli
16	445	97.2	93	13	US-08-939-107-2	Sequence 2, Appli
17	445	97.2	93	14	US-09-067-447-2	Sequence 2, Appli
18	445	97.2	93	14	US-09-067-447B-2	Sequence 2, Appli
19	445	97.2	93	14	US-09-067-447B-2	Sequence 2, Appli
20	445	97.2	93	19	US-09-509-165A-2	Sequence 2, Appli
21	445	97.2	93	19	US-09-591-992-2	Sequence 2, Appli
22	445	97.2	93	21	US-09-712-726-2	Sequence 2, Appli
23	445	97.2	93	21	US-09-791-537-22726	Sequence 2, Appli
24	445	97.2	93	22	US-09-811-088-2	Sequence 2, Appli
25	445	97.2	93	22	US-09-837-446-6	Sequence 6, Appli
26	445	97.2	100	21	US-09-760-476-2007	Sequence 2007, Ap
27	445	97.2	100	21	US-09-760-481-204	Sequence 204, App
28	445	97.2	100	26	US-10-216-245-2007	Sequence 2007, Ap
29	445	97.2	100	26	US-10-216-388-204	Sequence 204, App
30	445	97.2	100	26	US-10-217-651-449	Sequence 449, App
31	440	96.1	93	1	PCT-US00-30237-2	Sequence 2, Appli
32	440	96.1	93	13	US-08-986-188-2	Sequence 2, Appli
33	440	96.1	93	18	US-09-432-768-2	Sequence 2, Appli
34	440	96.1	93	18	US-09-484-221-2	Sequence 2, Appli
35	440	96.1	93	23	US-09-908-599-2	Sequence 2, Appli
36	440	96.1	93	23	US-09-908-600-2	Sequence 2, Appli
37	440	96.1	93	25	US-10-132-438-2	Sequence 2, Appli
38	440	96.1	93	27	US-60-032-432-2	Sequence 2, Appli
39	436	95.2	93	14	US-09-067-447-41	Sequence 41, Appl
40	436	95.2	93	14	US-09-067-447-41	Sequence 41, Appl
41	436	95.2	93	19	US-09-509-165A-41	Sequence 41, Appl
42	413	91.5	93	19	US-09-509-165A-46	Sequence 46, Appl
43	413	90.2	86	13	US-08-925-857-10	Sequence 10, Appl
44	343	74.9	69	13	US-08-939-107-31	Sequence 31, Appl
45	343	74.9	69	14	US-09-067-447-31	Sequence 31, Appl

ALIGNMENTS

RESULT 1
US-08-558-658-25
Sequence 25, Application US/08558658
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESSES:
ADDRESS: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/558,658
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33009
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
STRANDEDNESS: single.
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:

NAME/KEY: Protein
LOCATION: 1..69
FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

US-08-558-658-25

Query Match 97.4%; Score 446; DB 9; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.2e-48;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFWTSDSC 60

Db 1 MARLQATLLVVLVLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFWTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXMKMLKLSQ 93

Db 61 PRPGVLLTFRDKXICADPRVPVXXMKMLKLSQ 93

RESULT 2

US-08-939-107-25

SEQUENCE 25, Application US/08939107

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

APPLICANT: Raport, Carol J.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

NUMBER OF SEQUENCES: 40

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/939,107

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/558,658

FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/33318

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

FEATURE:

NAME/KEY: Protein

LOCATION: 1..69

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."

OTHER INFORMATION:

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; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-09-067-447B-25
Query Match          97.4%; Score 446; DB 14; Length 93;
Best Local Similarity 100.08; Pred. No. 2.2e-48;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 MARLQTALLVLLVLAVLAQLQTEAGPYCANMEDSVCCRDYVRVRLPLXVVXFHXWTSDCS 60
         |||||
Db       1 MARLQTALLVLLVLAVLAQLQTEAGPYCANMEDSVCCRDYVRVRLPLXVVXFHXWTSDCS 60
         |||||
QY      61 PRPGVLLTFRDKKXCICADPRPVXXKMILNKLQS 93
         |||||
Db       61 PRPGVLLTFRDKKXCICADPRPVXXKMILNKLQS 93
         |||||
RESULT 6
US-09-509-165A-25
; Sequence 25, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; FILE REFERENCE: 27866/34810
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07

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Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 8

US-08-464-594-2

; Sequence 2, Application US/08464594

; GENERAL INFORMATION:

; APPLICANT: LI, ET AL.

; TITLE OF INVENTION: Human Chemokine Beta-13

; NUMBER OF SEQUENCES: 8

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,

; ADDRESSEE: CECCHI, STEWART & OLSTEIN

; STREET: 6 BECKER FARM ROAD

; CITY: ROSELAND

; STATE: NEW JERSEY

; COUNTRY: USA

; ZIP: 07068

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5 INCH DISKETTE

; COMPUTER: IBM PS/2

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: WORD PERFECT 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/464,594

; FILING DATE: June 5, 1995

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: FERRARO, GREGORY D.

; REGISTRATION NUMBER: 36,134

; REFERENCE/DOCKET NUMBER: 325800-443

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 201-994-1700

; TELEFAX: 201-994-1744

; INFORMATION FOR SEQ ID NO: 2:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 93 AMINO ACIDS

; TYPE: AMINO ACID

; STRANDEDNESS:

; TOPOLOGY: LINEAR

; MOLECULE TYPE: PROTEIN

US-08-464-594-2

Query Match 97.2%; Score 445; DB 8; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 9

US-08-479-620-2

; Sequence 2, Application US/08479620

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE

; NUMBER OF SEQUENCES: 24

; CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago

STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/479,620

FILING DATE:

CLASSIFICATION: 536

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/32628

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-479-620-2

Query Match 97.2%; Score 445; DB 8; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 10

US-08-558-658-2

; Sequence 2, Application US/08558658

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

; TITLE OF INVENTION: ANALOGS

; NUMBER OF SEQUENCES: 25

; CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/558,658

FILING DATE:

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33009
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-558-658-2

Query Match 97.2%; Score 445; DB 9; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
QY 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93

RESULT 11
US-08-760-127-3
Sequence 3, Application US/08760127
GENERAL INFORMATION:
APPLICANT: Chang, Ming-shi
APPLICANT: Andrew, David P.
TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Amgen Inc.
STREET: 1840 De Havilland Drive
CITY: Thousand Oaks
STATE: California
COUNTRY: U.S.A.
ZIP: 91320
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,127
FILING DATE: 03-DEC-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Whiteford, Wendy A.
REGISTRATION NUMBER: 36,964
REFERENCE/DOCKET NUMBER: A-429
TELEPHONE: (805) 447-1008
TELEFAX: (805) 447-1090
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-760-127-3

Query Match 97.2%; Score 445; DB 11; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60

DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
QY 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93

RESULT 12
US-08-820-364-2
Sequence 2, Application US/08820364
GENERAL INFORMATION:
APPLICANT: Gearing, David P.
APPLICANT: Pan, Yang
TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/820,364
FILING DATE: 12-MAR-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D., Anita L.
REGISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 07334/023001
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-820-364-2

Query Match 97.2%; Score 445; DB 12; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
QY 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKXICADPRVXXMILNKLQ 93

RESULT 13
US-08-925-857-12
Sequence 12, Application US/08925857
GENERAL INFORMATION:
APPLICANT: Gorman, Daniel M.
APPLICANT: Hedrick, Joseph A.
APPLICANT: Zlotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: DNAX Research Institute

Search completed: July 28, 2003, 04:14:53
Job time : 106.676 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 32.8235 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-25
 Perfect score: 458
 Sequence: 1 MARIQTALLVVVLVLLAVALQ.....XICADPRVPXXKMILNKLQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues

Total number of hits satisfying chosen parameters: .1232328

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 10%
                  Listing first 45

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Database :

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3: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pcp.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query			ID	Description
	Score	Match	Length		
1	445	97.2	93	PCT-US02-35606-109	Sequence 109, App
2	445	97.2	93	PCT-US02-35606-145	Sequence 146, App
3	445	97.2	93	PCT-US02-40891-473	Sequence 473, App
4	445	97.2	93	PCT-US02-40891-549	Sequence 549, App
5	445	97.2	93	PCT-US02-40891-638	Sequence 638, App
6	445	97.2	93	PCT-US02-40891-639	Sequence 639, App
7	445	97.2	93	PCT-US02-40891-640	Sequence 640, App
8	445	97.2	93	PCT-US02-40891-641	Sequence 641, App
9	445	97.2	93	US-10-314-410-2	Sequence 2, Appli
10	445	97.2	93	US-10-405-027-5105	Sequence 5105, Ap
11	445	97.2	93	US-10-445-790-2	Sequence 2, Appli
12	445	97.2	93	US-60-453-135-8659	Sequence 8659, Ap
13	445	97.2	93	US-60-453-050-8659	Sequence 8659, Ap
14	445	97.2	93	US-60-455-444-4765	Sequence 4765, Ap
15	445	97.2	93	US-60-465-241-4765	Sequence 4765, Ap
16	445	97.2	93	US-60-466-412-8659	Sequence 8659, Ap
17	440	96.1	93	US-10-285-572-2	Sequence 2, Appli
18	440	96.1	93	US-10-137-438A-2	Sequence 2, Appli
19	440	96.1	93	US-10-406-494-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1

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PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/7331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

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Query Match 97.28: Score 445: DB 2: Length 93:

Qy	1	MARLOTALLVVLVLVAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFHWTSDSC	60
Db	1	MARLOTALLVVLVLVAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFHWTSDSC	60
Qy	61	PRPGVVLTFRDKXICADPRVPPXXKMIILNKLQS	93
Db	61	PRPGVVLTFRDKXICADPRVPPXXKMIILNKLQS	93

RESULT 2

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PCT-US02-35606-146
;
; Sequence 146, Application PC/TUS0235606
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; GENERAL INFORMATION:
;
; APPLICANT: Human Genome Sciences, Inc.
;
; TITLE OF INVENTION: 41 Human Secreted Proteins
;
; FILE REFERENCE: PS740PCT
;
; CURRENT APPLICATION NUMBER: PCT/US02/35606
;
; CURRENT FILING DATE: 2002-11-06
;
; PRIOR APPLICATION NUMBER: 60/331,046
;

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;; PRIOR FILING DATE: 2001-11-07
;; NUMBER OF SEQ ID NOS: 160
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 146
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
|||||

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||
Db 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||

RESULT 3
PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
|||||

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||
Db 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||

RESULT 4
PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-549

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
|||||

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||
Db 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
|||||

RESULT 5
PCT-US02-40891-638
; Sequence 638, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611


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; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||
Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||

Qy 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
    ||||||||||| ||||||| |||||||
Db 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
    ||||||||||| ||||||| |||||||

RESULT 6
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||
Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||

Qy 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
    ||||||||||| ||||||| |||||||
Db 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
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RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||
Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||| ||||||| |||||||

Qy 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
    ||||||||||| ||||||| |||||||
Db 61 PRGVVLLTFRDKXICADPRVPXXKMLNKLQSQ 93
    ||||||||||| ||||||| |||||||

RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
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Query Match          97.2%; Score 445; DB 12; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||

QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||

RESULT 12
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: IAKOUBOVA, Olga
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-8659

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||

QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||

RESULT 13
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: LUKE, May
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-050-8659

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||

QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
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Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||

RESULT 14
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-455-444-4765

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||

QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||

RESULT 15
US-60-465-241-4765
; Sequence 4765, Application US/60465241
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001468
; CURRENT APPLICATION NUMBER: US/60/465,241
; CURRENT FILING DATE: 2003-04-23
; NUMBER OF SEQ ID NOS: 258418
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-465-241-4765

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRPLRVVXVHFXTSDSC 60
    |||||

QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNKLQ 93
    |||||

Search completed: July 28, 2003, 04:18:50
Job time : 33.8235 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:01:18 ; Search time 9.18277 Seconds
(without alignments)
973.617 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQTAALLVLLVLAVALQ.....XICADPRVXXMKLNKLSQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR-73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	130	28.4	92	2 I52322	macrophage inflam
2	123.5	27.0	92	2 A32393	macrophage inflam
3	121.5	26.5	91	1 A28815	monocyte chemoatr
4	117	25.5	91	1 A46539	monocyte chemoatr
5	115.5	25.2	92	1 A31767	macrophage inflam
6	114	24.9	92	2 A30574	macrophage inflam
7	114	24.9	93	2 B35673	LD78-beta protein
8	106.5	23.3	92	2 C30552	macrophage inflam
9	103.5	22.6	109	2 A54678	monocyte chemotact
10	103	22.5	99	2 JC5295	monocyte chemotact
11	98.5	21.5	92	2 I46730	immune activation
12	98	21.4	120	2 I48147	monocyte chemoatr
13	92.5	20.2	99	2 JC2417	monocyte chemoatr
14	91	19.9	99	2 A60299	monocyte chemoatr
15	88.5	19.3	97	2 JC4912	toxatin precursor
16	88.5	19.3	99	1 A39296	monocyte chemoatr
17	88.5	19.3	99	2 JC2336	monocyte chemoatr
18	87	19.0	148	1 S07723	immediate-early se
19	85	18.6	116	2 I49555	gene C10 protein-
20	83.5	18.2	125	2 I46857	monocyte chemoatr
21	80	17.5	96	2 I48099	toxatin precursor
22	79	17.2	96	2 JC2478	monocyte chemoatr
23	79	17.2	99	2 JC2136	monocyte chemoatr
24	76	16.6	148	1 A30209	PDGF-inducible JE
25	75.5	16.5	114	1 ETHUL	lymphotactin precu
26	74	16.2	50	2 C60407	monocyte adherence
27	74	16.2	114	2 A55010	neutrophil-activat
28	74	16.2	120	2 JE0177	lymphocyte and mon
29	71	15.5	105	2 A26774	platelet factor 4

30	69	15.1	100	2 JH0200	macrophage inflam
31	68.5	15.0	96	2 A37336	I-309 protein prec
32	65.5	14.3	132	2 A57325	C-X-C chemokine LI
33	65.5	14.3	688	2 E96777	probable anion exc
34	64	14.0	119	2 A42881	platelet basic pro
35	63	13.8	97	2 A48093	monocytic cytokine
36	61.5	13.4	85	1 B30552	T-cell activation
37	61	13.3	92	2 S24236	TCA3 protein - mou
38	61	13.3	113	2 JC7800	neutrophil activat
39	61	13.3	212	2 S09623	agglutinin isolect
40	60.5	13.2	3947	2 T52486	ferrichrome sidero
41	60	13.1	100	2 S46198	cytokine-induced n
42	60	13.1	206	2 D72323	conserved hypothet
43	60	13.1	213	1 AEW72	agglutinin isolect
44	60	13.1	364	2 B64766	yaiW protein - Esc
45	59	12.9	654	2 T34960	cell division prot

ALIGNMENTS

RESULT 1

I52322

macrophage inflammatory protein-lalpha - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 16-Jul-1999

C:Accession: I52322

R:Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.

Biochem. Biophys. Res. Commun. 211, 289-295, 1995

A:Title: Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein

A:Reference number: I52322; MUID:95298037; PMID:7779098

A:Accession: I52322

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-92 <RES>

A:Cross-references: EMBL:U22414; NID:g790632; PIDN:AAA80608.1; PID:g790633

C:Superfamily: macrophage inflammatory protein

Query Match 28.4%; Score 130; DB 2; Length 92;

Best Local Similarity 35.9%; Pred. No. 1.2e-08;

Matches 28; Conservative 15; Mismatches 33; Indels 2; Gaps 2;

Qy 3 RLQTLALVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVVXHFWTSDSCP 62

Db 2 KVSTAALAVLLCTMALWNEVFSAPYGAD-TPTACCFSYGR-QIPRKFIADYFETSSLSQ 59

Qy 63 PGVVLLTFRDKXICADPR 80

Db 60 PGVIFLTNRNQICADPK 77

RESULT 2

A32393

macrophage inflammatory protein-1-alpha precursor - mouse

N:Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-1a; SI

C:Species: Mus musculus (house mouse)

C>Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999

C:Accession: S11685; A32393; S04533; A53885; A30552; P50303; A27596; I56104

R:Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.

Nucleic Acids Res. 18, 5561, 1990

A:Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein

A:Reference number: S11685; MUID:91016858; PMID:2216738

A:Accession: S11685

A:Molecule type: DNA

A:Residues: 1-92 <GRO>

A:Cross-references: EMBL:X53372; NID:g54062; PIDN:CAA37452.1; PID:g297531

A>Note: the authors' translation of the nucleotide sequence differs at several positi

R:Kwon, B.S.; Weissman, S.M.

Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989

A:Title: cDNA sequence of two inducible T-cell genes.

A:Reference number: A32393; MUID:89184547; PMID:2784565

A:Accession: A32393

A:Molecule type: mRNA

QY 65 VLLTFRDXKICADPRVPEXXKKMLNKL 91
||| : ||| : |||
Db 62 VFVTRKNRQVCANPEKKWVREYNLSL 88

RESULT 4

A46539 monocyte chemoattractant cytokine RANTES precursor - mouse

N:Alternate names: MuRantes

C:Species: Mus musculus (house mouse)

C>Date: 18-Jun-1993 #sequence.Revision 16-Aug-1996 #text_change 22-Jun-1999

C:Accession: I48875; A46539; I48654; I56970

R:Danoff, T.M.; Galley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.

J. Immunol. 152, 1182-1189, 1994

A:Title: Cloning, genomic organization, and chromosomal localization of the Scya5 9'-

A:Reference number: I48875; MUID:94132613; PMID:7507961

A:Accession: I48875

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-91 <DAS>

A:Cross-references: EMBL:U02298; NID:9460090; PIDN:AAA18302.1; PID:g460091

R:Schall, T.J.; Simpson, N.J.; Mak, J.Y.

Eur. J. Immunol. 22, 1477-1481, 1992

A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural-

A:Reference number: A46539; MUID:92289805; PMID:1376260

A:Accession: A46539

A:Molecule type: mRNA

A:Residues: 1-18, 'A' 20-91 <SCH>

A:Cross-references: GB:S37648; NID:9250207; PIDN:AAB22330.1; PID:g250208

A:Experimental source: macrophage cell line PUS-1.8

A>Note: sequence extracted from NCBI backbone (NCBIN:106766, NCBI:P106770)

R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.-

Mol. Cell. Biol. 14, 2914-2925, 1994

A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking D

A:Reference number: I48654; MUID:94217689; PMID:75113046

A:Accession: I48654

A>Status: translation not shown; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-91 <SHI>

A:Accession: I48654
A:Residues: 1-18, 'A', '20'-91 <SCH>
A:Cross-references: GB:S37648; NID:g250207; PIDN:AAE22330.1; PID:g250208
A:Experimental source: macrophage cell line P05-1.8
A:Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIPI:106770)
R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A. -
Mol. Cell. Biol. 14, 2914-2925, 1994
A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking D
A:Reference number: I48654; MUID:94217689; PMID:7513046
A:Accession: I48654
A:Status: translation not shown; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <SHI>

A:Reference number: S10157; MUID:90287702; PMID:1972563
A:Accession: S10157
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-93 <IRV>
A:Cross-references: ENBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
C:Comment: This protein is a member of a "small inducible" or "activation specific" g
C:Genetics:
A:Gene: GDB:SCYA4
A:Cross-references: GDB:I20369; OMIM:182284
A:Map position: 17q11-17q21
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-93/Product: LD78-beta protein #status predicted <MAT>

Query Match 24.9%; Score 114; DB 2; Length 93;
Best Local Similarity 34.2%; Pred. No. 1le-06;
Matches 25; Conservative 13; Mismatches 33; Indels 2; Gaps 2;

QY 7 ALLVVLLVAVALQATGAGYGANMEDSVCCRDYRVRYRLPLXVVXHFXMTSDSCPFGVV 66
DB II :: : I I I I : : I I I I : : I I I I : : I I I I :
7 AALLVLTALCNQLSA-PLAAD-TPTACCFYSRQPQNFIADYFTTSQCCKPSVI 64

QY 67 LLTFRDKXICADP 79
DB II I : : IIII
65 FLTKRGROVCADP 77

RESULT 8
C30552
macrophage inflammatory protein 1-beta precursor - mouse
N:Alternate names: HA00; SIS gamma; T-cell activation protein gamma
C:Species: Mus musculus (house mouse)
C>Date: 28-Aug-1989 #sequence.revision 28-Aug-1989 #text_change 16-Jul-1999
C:Accession: C30552; JL0088; PS0304; S22042
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A>Title: A family of small inducible proteins secreted by leukocytes are members of a
s of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: C30552
A:Molecule type: mRNA
A:Residues: 1-92

A:Cross-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D. =
J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, and =
A:Reference number: JL0088; MUID:89067830; PMID:3058856
A:Accession: JL0088
A:Molecule type: mRNA
A:Residues: 1-92 <SHE>
A:Cross-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
A:Accession: PS0304
A:Molecule type: protein
A:Residues: 24-33,'XX'36,'X'38 <SH2>
R:Dauberstes, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M.
submitted to the EMBL Data Library, October 1991
A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.
A:Reference number: S22042
A:Accession: S22042
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-92 <DAU>
A:Cross-references: ENBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127
C:Comment: This protein is a monokine.
C:Genetics:
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>

A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A:Reference number: A33476; MUID:90097880; PMID:2513477
A:Accession: A33476
A:Molecule type: mRNA
A:Residues: 1-99 <RO>
R:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; R.Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J. FEBS Lett. 244, 487-493, 1989

A:Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning
A:Reference number: S03339; MUID:89153605; PMID:2465924
A:Accession: S03339
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <YOS>
R:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A:Experimental source: glioma cell line U-105MG
R.Yoshimura, T.; Leonard, E.J. Adv. Exp. Med. Biol. 305, 47-56, 1991

A:Title: Human monocyte chemoattractant protein-1 (MCP-1).
A:Reference number: I51841; MUID:92095166; PMID:1661560
A:Accession: I51841
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-99 <YO2>
R:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R:Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A. Int. J. Cancer 45, 795-797, 1990

A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactin-1/MCAF).
A:Reference number: A60299; MUID:90216082; PMID:2182547
A:Accession: A60299
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <BOT>
R:Furutani, Y.; Nomura, H.; Notake, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, J. Biochem. Biophys. Res. Commun. 159, 249-255, 1989

A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and activation factor-1 (HML-1).
A:Reference number: A32300; MUID:89165862; PMID:2923622
A:Accession: A32300
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <FUR>
R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, D.; Lippman, M.E. Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989

A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative member of the chemokine family.
A:Reference number: A32396; MUID:89184525; PMID:2648385
A:Accession: A32396
A:Molecule type: protein
A:Residues: 'X', 25-99 <ROB>
R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J. Biochem. Biophys. Res. Commun. 167, 904-909, 1990

A:Title: Identification of the monocyte chemoattractant protein from human osteosarcoma cells.
A:Reference number: A34561; MUID:90211336; PMID:2322286
A:Accession: A34561
A:Molecule type: protein
A:Residues: 29-33, 'XX', 36-52; 82-92 <DEC>
R.Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P. Mol. Cell. Biochem. 126, 61-68, 1993

A:Title: The expression of monocyte chemoattractant protein (MCP-1) in human vascular endothelial cells.
A:Reference number: I57488; MUID:94150478; PMID:8107690
A:Accession: I57488
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-99 <LIV>
R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. 14, 29-32, 1994

A:Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1).
A:Reference number: JC1096
A:Accession: JC1096
A:Molecule type: mRNA

A:Reference number: I48147; MUID:93267104; PMID:8496603
A:Accession: I48147
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-120 <RES>
R:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
A:Gene: MCP-1
C:Superfamily: macrophage inflammatory protein

Query Match 21.4%; Score 98; DB 2; Length 120;
Best Local Similarity 31.5%; Pred No. 0.00013;
Matches 28; Conservative 15; Mismatches 42; Indels 4; Gaps 3;

DJ 6 TALLVVLVALVAQTAGYGVANMEDSVCCRDVVRYRLPLXVXHFXWTSQCRPPG 64
S VLLGLLVIEATFCSLMAOQDGN--TPTCYTFNK-QIPLKRVKGVERITSSRCPOEA 61
VLLTRFDKKICADPRVEXKMINKLSQ 93
VIERTLKKEVCADPTOKWODYAKLDQ 90

RESULT 13
JC2417
monocyte chemoattractant protein-2 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C>Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
A:Accession: JC2417
R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H. Biochem. Biophys. Res. Commun. 205, 148-153, 1994

A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis of its role in signal transduction.
A:Reference number: JC2417; MUID:95091716; PMID:7999015
A:Accession: JC2417
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
R:Cross-references: GB:Z48480; NID:g683718; PIDN:CAA80371.1; PID:g683719
A:Experimental source: corpus luteum
C:Superfamily: macrophage inflammatory protein
F:1-23/DNA: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 20.2%; Score 92.5; DB 2; Length 99;
Best Local Similarity 28.7%; Pred. No. 0.0005;
Matches 29; Conservative 19; Mismatches 36; Indels 17; Gaps 5;

DJ 4 LQATALVLLVALVAQATE--AGPYGANMEDSV-----CCRDVYRYRLPLXVXHFX-W 55
MOVSAALLCILLTLTAFASTQVLAQP-----DSVIPITCCFLVGKIPFKLESYTTRI 54
TSDCSRPGRVLLTRFDKKICADPR---VPXXMKINIKLSQ 93
TNQCQPEAVIFTKRADKEVCADPQQKWQNYSKKLLDKQSQ 95

RESULT 14
A60299
monocyte chemoattractant protein 1 precursor - human
N:Alternate names: GDGF-1; glioma-derived monocyte chemoattractant factor 1; MCAF; MCP-1; monocyte chemoattractant factor 2 (GDGF-2)

C:Species: Homo sapiens (man)
C>Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999
A:Accession: A33476; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488; JC1096
R.Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E. Biochem. Biophys. Res. Commun. 169, 346-351, 1990

A:Title: Structure of human monocyte chemoattractant protein gene and its regulation by TPA.
A:Reference number: A35474; MUID:90290466; PMID:2357211
A:Accession: A35474
A:Molecule type: DNA
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Residues: 1-99 <SHY>
R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G. Mol. Cell. Biol. 9, 4687-4695, 1989

Search completed: July 28, 2003, 04:15:50
Job time : 10.1828 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-25

Perfect score: 458

Sequence: 1 MARLQTAALLVLLVLAVALQ.....XICADPRVPPXXRMILNKLSQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	445	97.2	93	1 SY22_HUMAN	O00626 homo sapien
2	297	64.8	92	1 SY22_MOUSE	O88430 mus musculus
3	139	30.3	89	1 SY18_HUMAN	P55774 h small ind
4	130.5	28.5	90	1 SY04_CHICK	Q90826 gallus gall
5	130	28.4	92	1 SY03_RAT	P50229 rattus norv
6	123.5	27.0	92	1 SY03_MOUSE	P10855 mus musculus
7	121.5	26.5	91	1 SY05_HUMAN	P13501 homo sapien
8	119	26.0	93	1 SY14_HUMAN	Q16627 homo sapien
9	117	25.5	91	1 SY05_MOUSE	P30882 mus musculus
10	116.5	25.4	92	1 SY05_RAT	P50231 rattus norv
11	115.5	25.2	92	1 SY04_HUMAN	P13236 h small ind
12	114	24.9	92	1 SY03_HUMAN	P10147 homo sapien
13	114	24.9	93	1 SY03_HUMAN	P16619 homo sapien
14	112.5	24.6	91	1 SY05_CAVPO	P97272 cavia porce
15	110.5	24.1	92	1 SY04_RAT	P50230 rattus norv
16	110	24.0	113	1 SY15_HUMAN	Q16663 homo sapien
17	109.5	23.9	91	1 SY05_BOVIN	O97919 bos taurus
18	109.5	23.9	104	1 SY12_MOUSE	Q62401 mus musculus
19	108	23.6	94	1 SY17_HUMAN	Q92581 homo sapien
20	107	23.4	94	1 VM12_KSHV	Q98157 kaposi's sa
21	106.5	23.3	92	1 SY04_MOUSE	P14097 mus musculus
22	103.5	22.6	99	1 SY07_HUMAN	P80098 homo sapien
23	103	22.5	99	1 SY08_HUMAN	P80075 homo sapien
24	98.5	21.5	92	1 SY04_RABIT	P46632 oryctolagus
25	98	21.4	120	1 SY02_CAVPO	Q08782 cavia porce
26	96.5	21.1	70	1 REG1_BOVIN	P82943 bos taurus
27	95	20.7	98	1 SY19_HUMAN	Q99731 homo sapien
28	93.5	20.4	98	1 SY13_HUMAN	O99616 homo sapien
29	92.5	20.2	99	1 SY08_PIG	P49873 sus scrofa
30	92	20.1	101	1 SY02_CANFA	P52203 canis fami
31	91.5	20.0	108	1 SY19_MOUSE	O70460 mus musculus
32	91	19.9	99	1 SY02_HUMAN	P13500 homo sapien
33	90	19.7	97	1 E0TA_HUMAN	P51671 homo sapien

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RL	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RP	SEQUENCE FROM N.A.			
RN	TISSUE=Macrophage;			
RC	MEDLINE-97460118; PubMed-9312138;			
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RL	J. Biol. Chem. 272:25229-25237(1997).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RA	MEDLINE-99425270; PubMed-10493829;			
RL	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RL	Genomics 60:295-308(1999).			
RN	[4]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Pancreas, and Spleen;			
RA	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION.			
RA	MEDLINE-98104168; PubMed-9430724;			
RL	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

Q9myh4 macaca fasc
O89093 mus musculus
O91kc0 mus musculus
P55773 homo sapien
Q9y258 homo sapien
P28291 bos taurus
O00175 homo sapien
P14844 rattus norv
Q9z121 mus musculus
O09141 bos taurus
P27784 mus musculus
P28292 oryctolagus

ALIGNMENTS

```

RT chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1768(1998).
CC -1- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24306.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; Q98157; ICM9.
DR Genew; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 97.2%; Score 445; DB 1; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.9e-46;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXHFXTSDSC 60
Db 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXHFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
Db -61 PRPGVLLTFRDKETCADPRVPVXKMLNKLQ 93

RESULT 2
SY22_MOUSE
ID SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CC22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

```

```

[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardali E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rollink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -1- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 64.8%; Score 297; DB 1; Length 92;
Best Local Similarity 59.8%; Pred. No. 9.6e-29;
Matches 55; Conservative 17; Mismatches 20; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXHFXTSDSC 60
Db 1 MATLRVPLLVLLVALVAIQTSAGPYGANVEDSICQDYIRHPLPLSLVKEFFWTSKSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 92
Db 61 RKPVGVLITVKNRDICADPRQVWVKLLHLKLS 92

RESULT 3
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P53774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CC118) (Macrophage
DE inflammatory protein 4) (MIP-4) (pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;

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RN [1] SEQUENCE FROM N.A.
 RP Li H., Ruben S.;
 RA "Macrophage inflammatory protein-3 and -4";
 RL Patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE-Aorta, and Lung;
 RX MEDLINE=97376836; PubMed=9233607;
 RA Hieshima K., Imai T., Baba M., Sakaki Y., Takatsuki K.,
 RA Nakagawa T., Tsurutu J., Takeya M., Yoshie O., Nomiyaama H.;
 RA Miura R., Odenakker G., van Damme J., Yoshie O., Nomiyaama H.;
 RT "A novel human CC chemokine PARC that is most homologous to
 T lymphocytes, but not for monocytes";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98230488; PubMed=9570561;
 RA Kodelja V., Mueller C., Pollitz O., Hakij N., Orfanos C.E., Goerdts S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 structural homologue of macrophage inflammatory protein-1 alpha with
 a Th2-associated expression pattern";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 of novel chemokines using the WorldWideWeb and expressed sequence tag
 databases";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RC TISSUE-Dendritic cell;
 RX MEDLINE=97336102; PubMed=9192897;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 naive T cells";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99168908; PubMed=10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiyaama H.;
 RT "Chemokine PARC gene (SCYA18) generated by fusion of two
 MIP-1alpha/LD78alpha-like genes";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE=99189237; PubMed=10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Pollitz O., Kodelja V., Guillot P., Orfanos C.E., Goerdts S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 within the first intron sequence";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES.
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,

CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 CC EMBL; AB000221; BAA21670.1; -
 CC ENBL; Y13710; CAA74039.1; -
 CC ENBL; AB012113; BAA34368.1; -
 CC ENBL; AF082214; AAC32287.1; -
 CC ENBL; AF082212; AAC32287.1; JOINED.
 CC ENBL; AF082213; AAC32287.1; JOINED.
 CC ENBL; AF111198; AAD30390.1; -
 CC HSSP; P12336; IHUM.
 CC Genew; HGNC:10616; SCYA18.
 CC MIM; 603757; -
 CC InterPro; IPR000827; CC_Chemkine_sml.
 CC InterPro; IPR001811; Chemokine_IL8.
 CC Pfam; PF00048; IL8; 1.
 CC SMART; SM00199; SCY; 1.
 CC DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 CC KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 CC FT SIGNAL 1 20
 CC FT CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 CC FT DISULFID 30 54 BY SIMILARITY.
 CC FT DISULFID 31 70 BY SIMILARITY.
 CC SQ SEQUENCE 89 AA; 9849 MW; C287B94B9C0518E4 CRC64;
 Query Match 30.3%; Score 139; DB 1; Length 89;
 Best Local Similarity 38.0%; Pred. No. 7.6e-10;
 Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;
 QY 1 MARLQATALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYHFXWTSQSC 60
 Db 1 MKGLAAALLVLTCTMALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
 QY 61 PRPGVLLTFRDKKICADP 79
 Db 55 PKPGVILLTKRGRQICADP 73
 RESULT 4
 SY04_CHICK
 ID SY04_CHICK STANDARD; PRT; 90 AA.
 AC Q90826; Q910C9;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 15-JUN-2002 (Rel. 41, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
 DE protein 1-beta homolog).
 DE SCYA4.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.


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Db 60 PGVIFLTNRNQCADPK 77
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RESULT 6
SY03_MOUSE STANDARD; PRT; 92 AA.
AC P10855; P14096;
DT 01-JUL-1989 (Rel. 11, Created)
DT 01-APR-1990 (Rel. 14, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 precursor (CC33) (Macrophage inflammatory
DE protein 1-alpha) (MIP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding
DE chemotaxis protein) (LZG25B).
GN SCYA3 OR MIP1A.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=88258380; PubMed=3290382;
RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C.,
RA Gallegos C., Coit D., Merryweather J., Cerami A.;
RT "Cloning and characterization of a cDNA for murine macrophage
RT inflammatory protein (MIP), a novel monokine with inflammatory and
RT chemokinetic properties.";
RN J. Exp. Med. 167:1939-1944(1988).
RP REVISIONS.
RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C.,
RA Gallegos C., Coit D., Merryweather J., Cerami A.;
RL J. Exp. Med. 170:2189-2189(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=89093958; PubMed=2521353;
RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
RT "A family of small inducible proteins secreted by leukocytes are
RT members of a new superfamily that includes leukocyte and
RT fibroblast-derived inflammatory agents, growth factors, and
RT indicators of various activation processes.";
RL J. Immunol. 142:679-687(1989).
RN [4]
RP SEQUENCE FROM N.A.
RX STRAIN=DBA/2J;
RC MEDLINE=91016858; PubMed=2216738;
RA Grove M., Lowe S., Graham G., Praeger I., Plumb M.;
RT "Sequence of the murine haemopoietic stem cell inhibitor/macrophage
RT inflammatory protein 1 alpha gene.";
RL Nucleic Acids Res. 18:5561-5561(1990).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=89184547; PubMed=2784565;
RA Kwon B.S., Weissman S.M.;
RT "cDNA sequences of two inducible T-cell genes.";
RL Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=91237116; PubMed=2033269;
RA Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
RA Cerami A.;
RT "Genomic structure of murine macrophage inflammatory protein-1 alpha
RT and conservation of potential regulatory sequences with a human
RT homolog, LD78.";
RL J. Immunol. 146:4031-4040(1991).
RN [7]
RP SEQUENCE FROM N.A.
RX STRAIN=BALB/CJ, DBA/2J, SJL/J, and B10.S/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE OF 24-42.
RX MEDLINE=88154745; PubMed=3279154;

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RA Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G.,
RA Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cerami A.;
RT "Macrophages secrete a novel heparin-binding protein with
RT inflammatory and neutrophil chemokinetic properties.";
RL J. Exp. Med. 167:570-581(1988).
CC -|- FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
CC PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
CC BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
CC NEUTROPHILS.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; M23447; AAA0145.1; -
DR EMBL; X12531; CAA31047.1; -
DR EMBL; X53372; CAA37452.1; -
DR EMBL; J04491; AAA0304.1; -
DR EMBL; M73061; AAA39707.1; -
DR EMBL; AF065939; AAC17506.1; -
DR EMBL; AF065940; AAC17507.1; -
DR EMBL; AF065941; AAC17508.1; -
DR EMBL; AF065942; AAC17509.1; -
DR EMBL; AF065943; AAC17510.1; -
DR PIR; A27596; A27596.
DR PIR; A30552; A30552.
DR PIR; A32393; A32393.
DR PIR; S04533; S04533.
DR PIR; S11685; S11685.
DR HSP; P13236; IHUM.
DR MGD; MGI:98260; Scya3.
DR InterPro; IPR000827; CC_chemokine_sm.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
FT DISULFID 34 57 BY SIMILARITY.
FT DISULFID 35 73 BY SIMILARITY.
FT CONFLICT 22 22 F -> L (IN REF. 3).
FT CONFLICT 62 62 V -> A (IN REF. 3).
SQ SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DEDD38 CRC64;

Query Match 27.0%; Score 123.5; DB 1; Length 92;
Best Local Similarity 38.7%; Pred. No. 5.6e-08;
Matches 29; Conservative 14; Mismatches 29; Indels 3; Gaps 3;

QY 6 TALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLXVVFHXTWTSDCPRPGV 65
DB 6 TALAVLLCTMTCNQVFSA-PYGAD-TPTACCFYSR-KIPROFIVDYFTSSLSQPGV 62
QY 66 VLLTFRDKKXICADPR 80
DB 63 IFLTNRNRQICADSK 77

RESULT 7
SY05_HUMAN STANDARD; PRT; 91 AA.
AC P13501; O43646; Q9NYA2;
DT 01-JAN-1990 (Rel. 13, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)

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DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta) (T cell-specific protein p28) (TCP228).
GN SCVA5.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_taxid=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=88285659; PubMed=2456327;
RA Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,
RA Davis M.M., Krensky A.M.;
RT "A human T cell-specific molecule is a member of a new gene family.";
RL J. Immunol. 141:1018-1025(1988).
RN [2]
RP SEQUENCE FROM N.A.
RX Jang J.S., Kim B.E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
RN [4]
RP SEQUENCE FROM N.A.
RX Zeng Q.P., Yang R.Y., Fu L.C.;
RT "The complete sequence of human beta-chemokine RANTES mRNA.";
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RX Strausberg R.;
RL TISSUE=Brain;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION.
RX MEDLINE=96106406; PubMed=8525373;
RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
RN [7]
RP STRUCTURE BY NMR.
RX MEDLINE=95352612; PubMed=7542919;
RA Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;
RT "The three-dimensional solution structure of RANTES.";
RL Biochemistry 34:9307-9314(1995).
RN [8]
RP STRUCTURE BY NMR.
RX MEDLINE=95244456; PubMed=7537088;
RA Skelton N.J., Aspiras F., Ogez J., Schall T.J.;
RT "Proton NMR assignments and solution conformation of RANTES, a
RT chemokine of the C-C type.";
RL Biochemistry 34:5329-5342(1995).
RN [9]
RP SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RX MEDLINE=99111238; PubMed=9889151;
RA Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
RA Picard L., Wlodawer A., Lubkowski J., Kent S.B.;
RT "Total chemical synthesis and high-resolution crystal structure of
RT the potent anti-HIV protein AOP-RANTES.";
RL Chem. Biol. 6:43-51(1999).
RN [10]
RP X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RX Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
RA Lubkowski J.;
RT "The crystal structure of Met-RANTES: comparison with native RANTES
RT and AOP-RANTES.";
RL Protein Pept. Lett. 7:73-82(2000).
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER

CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCRL1, CCR3, CCR4 AND
CC CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T
CC CELLS. RECOMBINANT RANTES PROTEIN INDUCES A DOSE-DEPENDENT
CC INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN
CC IMMUNODEFICIENCY VIRUS (SIV).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- INDUCTION: BY MITOGENS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL; M21121; AAA36725.1; -
DR EMBL; AF043341; AAC03541.1; -
DR EMBL; AF088219; AAC03331.1; -
DR EMBL; AF286753; AAF73070.1; -
DR EMBL; BC008600; AAH08600.1; -
DR PIR; A28815; A28815.
DR PDB; 1HRJ; 14-OCT-96.
DR PDB; 1RTN; 03-JUN-95.
DR PDB; 1RTO; 03-JUN-95.
DR PDB; 1B3A; 23-APR-99.
DR PDB; 1BQT; 19-APR-00.
DR Gene; HGNC:10632; SCYA5.
DR MIM; 187011; -
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
KW 3D-structure.
FT SIGNAL 1 23
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57
FT DISULFID 34 73
FT CONFLICT 7 7 A -> R (IN REF. 1 AND 4).
FT CONFLICT 14 14 A -> V (IN REF. 4).
SQ SEQUENCE 91 AA; 9990 MW; F80BFAF9A87C620F CRC64;
Query Match 26.5%; Score 121.5; DB 1; Length 91;
Best Local Similarity 29.9%; Pred. NO. 9.6e-08;
Matches 26; Conservative 20; Mismatches 38; Indels 3; Gaps 2;
QY 6 TALLVLLVLLAVALQA-TEAGPYGNMEDSVCCRDYVRYRLPLXVVHFXHTSDSCPRPG 64
DB 4 SAALAVILIALCALCAPASAPYSS--DTTPCCFAIYIARPLPRAHIKEFYFTSGKSNPA 61
QY 65 VLLTFRDKXICADPRVEXXKMLNKL 91
DB 62 VVFVTRKNRQVCANPEKKWREYINSL 88
RESULT 8
SY14_HUMAN
ID SY14_HUMAN STANDARD; PRT; 93 AA.
AC O16627; O13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
DE (HCC-1/HCC-3) (NCC-2).
GN SCYA14 OR NCC2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

Mammalia; Euthera; Primates; Catarrhini; Hominoidea; Homo.
 NCBI_TaxID=9606;
 (1)
 SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
 TISSUE=Bone marrow;
 RX MEDLINE=96136773; PubMed=8551235;
 RA Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
 RA Kubies M., Tomczkowski J., Kirchhoff K., Raida M., Adermann K.,
 RA Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
 RA Baggiolini M., Forssmann W.-G.;
 RT "HCC-1, a novel chemokine from human plasma";
 RL J. Exp. Med. 183:295-299(1996).
 (2)
 SEQUENCE FROM N.A.
 TISSUE=Liver;
 RX MEDLINE=98263352; PubMed=9600961;
 RA Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
 RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
 RT "HCC-2, a human chemokine: gene structure, expression pattern, and
 RT biological activity";
 RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
 (3)
 SEQUENCE FROM N.A.
 RX MEDLINE=99228475; PubMed=10213461;
 RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
 RT "Organization of the chemokine gene cluster on human chromosome
 RT 17q11.2 containing the genes for CC chemokine MIP1-1, HCC-2, LEC, and
 RT RANTES";
 RL J. Interferon Cytokine Res. 19:227-234(1999).
 CC -1- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
 CC RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
 CC INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
 CC AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
 CC LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
 CC PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
 CC ARE PRODUCED BY ALTERNATIVE SPLICING.
 CC -1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
 CC TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
 CC MARROW. PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).

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 or send an email to license@isb-sib.ch).

 EMBL; 249270; CA89264.1; -
 EMBL; 270292; CA94307.1; -
 EMBL; 270293; CA94309.1; -
 EMBL; 249269; CA89263.1; -
 EMBL; AF088219; AAC63329.1; -
 EMBL; AF088219; AAF23982.1; -
 HSP; P13236; IHUM.
 Genew; HGNC:10612; SCYA14.
 MIM; 601392; -
 InterPro; IPR000827; CC_chemkine_sml.
 InterPro; IPR001811; Chemokine_IL8.
 Pfam; PF000048; IL8; 1.
 SMART; SM00199; SCY; 1.
 PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Signal; Alternative splicing.
 FT SIGNAL 1 19
 FT CHAIN 20 93 SMALL INDUCIBLE CYTOKINE A14.
 FT DISULFID 35 59 BY SIMILARITY.
 FT DISULFID 36 75 BY SIMILARITY.
 FT VARSPPLIC 27 27 R -> QTGGPKVVKVVKIQLKLVG (IN ISOFORM HCC-3).
 3).

SQ SEQUENCE 93 AA; 10678 MW; DDB899DC9148836 CRC64;
 Query Match 26.0%; Score 119; DB 1; Length 93;
 Best Local Similarity 27.2%; Pred. No. 2e-07; 32; Indels 8; Gaps 2;
 Matches 22; Conservative 19; Mismatches 32;
 Qy 3 RLOATALLVLLVLLVAL---QATEAGPYGANMEDSCCRDYVRYRLPLXVXHFXTSD 58
 Db 2 KISVAAPFFLLITIALGTKESSRGPY---HPSECCFYTYTKIPQIRIMDYETNS 57
 Qy 59 SCPRPGVLLVFRDKXICADP 79
 Db 58 QCSKPGVIFITKRGHSVCTNP 78
 RESULT 9
 ID SY05_MOUSE STANDARD; PRT; 91 AA.
 AC P30882;
 DT 01-JUL-1993 (Rel. 26, Created)
 DT 01-JUN-1994 (Rel. 29, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
 DE protein) (SIS-delta) (MurRantes).
 GN SCYA5.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92277990; PubMed=1375672;
 RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
 RA Krensky A.M., Neilson E.G.;
 RT "Isolation and characterization of cDNA from renal tubular epithelium
 RT encoding murine Rantes";
 RL Kidney Int. 41:220-225(1992).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92289805; PubMed=1376260;
 RA Schall T.J., Simpson N.J., Mak J.Y.;
 RT "Molecular cloning and expression of the murine RANTES cytokine:
 RT structural and functional conservation between mouse and man";
 RL Eur. J. Immunol. 22:1477-1481(1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=NIH Swiss;
 RX MEDLINE=94132613; PubMed=7507961;
 RA Danoff T.M., Lailey P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
 RT "Cloning, genomic organization, and chromosomal localization of the
 RT Scya5 gene encoding the murine chemokine Rantes";
 RL J. Immunol. 152:1182-1189(1994).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=BALB/C;
 RX MEDLINE=94217689; PubMed=7513046;
 RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
 RA Paznekas W.A.;
 RT "Definition of a lipopolysaccharide-responsive element in the 5'-
 RT flanking regions of Murantes and crg-2";
 RL Mol. Cell. Biol. 14:2914-2925(1994).
 RN [5]
 RP SEQUENCE FROM N.A.
 RC STRAIN=BALB/CJ,B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
 RA Ma R.Z., Teuscher C.;
 RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
 CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
 CC BASOPHILS AND ACTIVATES EOSINOPHILS.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).

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DR EMBL; M7747; AAA40029.1; -
 DR EMBL; S37648; AAB22330.1; -
 DR EMBL; U02298; AAA18302.1; -
 DR EMBL; X70675; CAA50011.1; -
 DR EMBL; AF065944; AAC17511.1; -
 DR EMBL; AF065945; AAC17512.1; -
 DR EMBL; AF065946; AAC17513.1; -
 DR EMBL; AF065947; AAC17514.1; -
 DR HSP; P13501; IRTN.
 DR MGD; MGI:98262; Scya5.
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
 FT SIGNAL 1 23 POTENTIAL.
 FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
 FT DISULFID 33 57 BY SIMILARITY.
 FT DISULFID 34 73 BY SIMILARITY.
 FT CONFLICT 19 19 T -> A (IN REF. 2).
 FT CONFLICT 41 41 A -> E (IN REF. 1).
 SQ SEQUENCE 91 AA; 10071 MW; 5DFD6F4684FE1C8 CRC64;

Query Match 25.5%; Score 117; DB 1; Length 91;
 Best Local Similarity 28.1%; Pred. No. 3.3e-07;
 Matches 25; Conservative 18; Mismatches 44; Indels 2; Gaps 1;
 QY 3 RIQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLXVYVHXFWTSDCPR 62
 DB 2 KISAALTIILTAALCTPASPSPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSN 59
 QY 63 PGVLLTFRDKXICADPRVXXKMLNLK 91
 DB 60 LAVVEVTRNRQVCANPEKWKVQVEYINYL 88

RESULT 10
 SY05_RAT
 ID SY05_RAT STANDARD; PRT; 92 AA.
 AC P50231;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
 GN SCYA5.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Long Evans; TISSUE=Lung;
 RA Jones M.L., Shanley T.P., Ward P.A.;
 RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
 CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES. MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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DR EMBL; U06436; AAA96499.1; -
 DR HSP; P13501; IRTN.
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
 FT SIGNAL 1 24 POTENTIAL.
 FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A5.
 FT DISULFID 34 58 BY SIMILARITY.
 FT DISULFID 35 74 BY SIMILARITY.
 SQ SEQUENCE 92 AA; 10170 MW; B4FBEC2B4208ABC6 CRC64;

Query Match 25.4%; Score 116.5; DB 1; Length 92;
 Best Local Similarity 30.0%; Pred. No. 3.8e-07;
 Matches 27; Conservative 19; Mismatches 41; Indels 3; Gaps 2;
 QY 3 RIQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLXVYVHXFWTSDCP 61
 DB 2 KISAASLTVLVAALCTPASPSPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCS 59
 QY 62 RGVVLLTFRDKXICADPRVXXKMLNLK 91
 DB 60 NLAVVFTVTRNRQVCANPEKWKVQVEYINYL 89

RESULT 11
 SY04_HUMAN
 ID SY04_HUMAN STANDARD; PRT; 92 AA.
 AC P13236; P22617; Q13704;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 01-JAN-1990 (Rel. 13, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2) (PAT 744) (H400) (SIS-gamma) (Lymphocyte activation gene-1 protein) (LAG-1) (HC21) (G-26 T lymphocyte-secreted protein).
 GN SCYA4 OR MIP1B OR LAG1.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=89071764; PubMed=2462251;
 RA Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard W.J.;
 RT "Identification, cloning, and characterization of an immune activation gene";
 RL Proc. Natl. Acad. Sci. U.S.A. 85:9704-9708(1988).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=89140347; PubMed=2521882;
 RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
 RT "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors";
 RL J. Immunol. 142:1582-1590(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=89093958; PubMed=2521353;
 RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
 RT "A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";

DT 01-MAR-1989 (Rel. 10, Last sequence update)
 DE 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha
 DE protein) (GO/GI switch regulatory protein 19-1) (GOS19-1 protein)
 DE (SIS-beta) (PAT 464.1).
 GN SCYA3 OR GOS19-1 OR MIP1A.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=86223879; PubMed=3086300;
 RX Obari K., Fukuda M., Maeda S., Shimada K.;
 RT "A cDNA clone used to study mRNA inducible in human tonsillar
 RT lymphocytes by a tumor promoter";
 RL J. Biochem. 99:885-894(1986).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89140347; PubMed=2521882;
 RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
 RT "Mitogenic activation of human T cells induces two closely related
 RT genes which share structural similarities with a new family of
 RT secreted factors";
 RL J. Immunol. 142:1582-1590(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91103879; PubMed=2271120;
 RA Blum S., Forsdyke R.E., Forsdyke D.R.;
 RT "three human homologs of a murine gene encoding an inhibitor of stem
 RT cell proliferation";
 RL DNA Cell Biol. 9:589-602(1990).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=90287155; PubMed=1694014;
 RA Nakao M., Nomiya H., Shimada K.;
 RT "Structures of human genes coding for cytokine LD78 and their
 RT expression";
 RL Mol. Cell. Biol. 10:3646-3658(1990).
 RN [5]
 RP SEQUENCE OF 23-92 FROM N.A.
 RA Jang J.S., Kim B.E.;
 RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49.
 RX MEDLINE=96127782; PubMed=8541527;
 RA Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S.,
 RA Craplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H.,
 RA Heyworth C.M., Lord B.I., McCourt M., Varley P.G., Wood L.M.,
 RA Edwards R.M., Lewis P.J.;
 RT "BB-10010: an active variant of human macrophage inflammatory protein-
 RT 1 alpha with improved pharmaceutical properties";
 RL Blood 86:4400-4408(1995).
 RN [7]
 RP SEQUENCE OF 27-40 AND 71-83, AND FUNCTION.
 RX MEDLINE=96106406; PubMed=8525373;
 RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
 RA Lusso P.;
 RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
 RT HIV-suppressive factors produced by CD8+ T cells";
 RL Science 270:1811-1815(1995).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC BINDS TO CCR1, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE
 CC FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
 CC A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
 CC AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY TPA OR PHA (TPA = 12-O-TETRADECANOYL PHORBOL-13
 CC ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
 CC MITOGEN)).
 CC -1- SIMILARITY: BELONGS TO THE INTERCERIN BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC). STRONG, TO SCYA3L1.

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 CC -----
 DR EMBL; D00044; BAA00029.1; -
 DR EMBL; M23452; AAA36316.1; -
 DR EMBL; M25315; AAA57255.1; -
 DR EMBL; X03754; CAA27388.1; -
 DR EMBL; X04018; CAA27643.1; ALT_SEQ.
 DR EMBL; M23178; AAA35858.1; -
 DR EMBL; D90144; BAA14172.1; -
 DR EMBL; AF043339; AAC03539.1; -
 DR PIR; A24198; A24198.
 DR PIR; A30574; A30574.
 DR HSP; P13236; IHUM.
 DR MIM; 182283; -
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 33 57 BY SIMILARITY.
 FT DISULFID 34 73 BY SIMILARITY.
 FT MUTAGEN 49 49 D->A: IN BB-10010; IMPROVED
 FT PHARMACEUTICAL PROPERTIES.
 SQ SEQUENCE 92 AA; 10085 MW; 517865D5D6776CA8 CRC64;
 Query Match 24.9%; Score 114; DB 1; Length 92;
 Best Local Similarity 32.5%; Pred. No. 7.7e-07;
 Matches 26; Conservative 15; Mismatches 31; Indels 8; Gaps 3;
 QY 3 RLOTALLVLLVLLAVALQATEAGPYGNM--EDSVCCRDYVRYRLPLXVXHFXWTS 59
 DB 2 QVSTAALAVL-LCTMAL---CNOFSASLAADPTACCFSTSRQIPONFIADYFETSSQ 56
 QY 60 CPRPGVVLLTFRDKXICADP 79
 DB 57 CSKPGVIFLTKRSRQVADP 76
 RESULT 13
 SY3L_HUMAN
 ID SY3L_HUMAN STANDARD; PRT; 93 AA.
 AC P16619;
 DT 01-AUG-1990 (Rel. 15, Created)
 DT 01-AUG-1990 (Rel. 15, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 like 1 precursor (Tonsillar lymphocyte
 DE LD78 beta protein) (GO/GI switch regulatory protein 19-2) (GOS19-2
 DE protein) (PAT 464.2).
 DE SCYA3L1 OR GOS19-2.
 GN Homo sapiens (Human).
 OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Blood;
 RX MEDLINE=90287702; PubMed=1972563;
 RA Irving S.G., Zipfel P.F., Balke J., Kelly K.;
 RA Burd P.R., Siebenlist U., Kelly K.;
 RT "Two inflammatory mediator cytokine genes are closely linked and
 RT variably amplified on chromosome 17q.";
 RL Nucleic Acids Res. 18:3261-3270(1990).

```

DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCU5) (T-cell specific RANTES
DE protein) (SIS-delta).
DE SCYA5.
GN Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Hystricognathi; Cavidae; Cavia.
OC NCBI_TaxId=10141;
RN [1]
RN SEQUENCE FROM N.A.
RN STRAIN=Dunkin-Hartley;
RC Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B.,
RA Wells T.N.C., White A.M., Westwick J., Watson M.L.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [2]
RN SEQUENCE FROM N.A.
RN TISSUE=Lung;
RC Asano K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A.,
RA Yamaguchi K., Kanazawa M.;
RL Submitted (APR-1997) to the EMBL/GenBank/DBJ databases.
CC -! FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS, CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -! SUBCELLULAR LOCATION: Secreted.
CC -! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U77037; AAC53293.1; -.
CC EMBL; AB002662; BAA19604.1; -.
CC HSP; PI3501; 1RTN.
CC InterPro; IPR000827; CC_Chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF000048; IL8; 1.
CC SMART; SM00199; SCF; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CC Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
CC SIGNAL 1 23 POTENTIAL.
CC CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
CC DISULFID 33 57 BY SIMILARITY.
CC DISULFID 34 73 BY SIMILARITY.
CC SEQUENCE 91 AA; 10088 MW; 7F6A31B751237D99 CRC64;
CC -----
Query Match 24.6%; Score 112.5; DB 1; Length 91;
Best Local Similarity 29.4%; Pred. No. 1 le-06;
Matches 25; Conservative 19; Mismatches 38; Indels 3; Gaps 2;
QY 7 ALLWLVLVLAVALQATEAGPYGANNMDSVCCRDYVRYRLPLXVVXHFXTSDSCPRGVV 66
Db || : | : | : | : | : | : | : | : | : | : | : | : | : | : |
7 ALCVILTAAALCPVAS-ASPYAS--DTTPCCPAYISRALPRTHKEVFYTTSSKCSNLAVV 63
QY 67 LITFRDKXICADPRVXXMILNKL 91
Db : | : : : | : | : | : | : | : | : | : | : | : | : | : |
64 FVTRKNRQVCANPEKKWVREYINSL 88
RESULT 15
SY04_RAT STANDARD; PRT; 92 AA.
ID SY04_RAT
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta).
GN SCYA4 OR MIPLB.

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Search completed: July 28, 2003, 04:01:12
Job time : 5.88445 secs

Search completed: July 28, 2003, 04:01:12
Job time : 5.88445 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 17.1933 Seconds
(without alignments)
1114.528 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLOTALEVLVLLVALQ.....XICADPRVPXXKMILNKLQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL_21.*
1: sp-archaea.*
2: sp-bacteria.*
3: sp-fungi.*
4: sp-human.*
5: sp-invertebrate.*
6: sp-mammal.*
7: sp-mhc.*
8: sp-organelle.*
9: sp-phage.*
10: sp-plant.*
11: sp-rodent.*
12: sp-virus.*
13: sp-vertebrate.*
14: sp_unclassified.*
15: sp-rvirus.*
16: sp-bacteriap.*
17: sp-archeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	295	64.4	92	11 Q9QZU2	Q9qzu2 mus musculus
2	288	62.9	92	11 Q9IZH5	Q9izh5 rattus norv
3	274	59.8	81	11 Q9QZU1	Q9qzu1 rattus norv
4	134	29.3	92	11 Q91Z65	Q91z65 sigmodon hi
5	131.5	28.7	90	13 Q9PWA6	Q9pwa6 gallus gall
6	130.5	28.5	90	13 Q91OC9	Q91oc9 gallus gall
7	128	27.9	91	13 Q8QG57	Q8qg57 gallus gall
8	127.5	27.8	92	11 Q91ZL0	Q91zl0 sigmodon hi
9	127	27.7	95	12 Q98158	Q98158 kaposi's sa
10	126	27.5	99	6 Q95N01	Q95n01 canis fami
11	125	27.3	92	6 Q8SQ40	Q8sq40 felis silve
12	120	26.2	89	13 Q918E0	Q918e0 gallus gall
13	119	26.0	93	6 Q8SQA6	Q8sqa6 bos taurus
14	114	24.9	93	4 Q96168	Q96168 homo sapien
15	113.5	24.8	93	11 Q9WU26	Q9wuz6 mus musculus
16	113.5	24.8	131	11 Q9R043	Q9r043 mus musculus

17	109	23.8	91	11 Q91ZL1	Q91zl1 sigmodon hi
18	106.5	23.3	93	11 Q9BRE0	Q9bre0 rattus norv
19	104.5	22.8	80	4 Q14745	Q14745 homo sapien
20	95	20.7	91	13 Q8QG56	Q8qg56 gallus gall
21	92.5	20.2	115	12 Q9WRT7	Q9wrt7 macaca mula
22	91	19.9	116	11 Q9D830	Q9d830 mus musculus
23	89.5	19.5	75	6 Q9TTQ1	Q9ttq1 equus cabal
24	88	19.2	118	12 Q9J2M1	Q9j2m1 macaca mula
25	87	19.0	116	11 Q9SM24	Q9sm24 mus musculus
26	85	18.6	100	6 Q95MD5	Q95md5 bos taurus
27	84	18.3	81	6 Q9RTQ2	Q9rtq2 equus cabal
28	82.5	18.0	133	11 Q91V84	Q91v84 mus musculus
29	80	17.5	97	11 Q92318	Q92318 cavia porce
30	80	17.5	100	6 Q9TTQ4	Q9ttq4 equus cabal
31	79.5	17.4	79	4 Q95689	Q95689 homo sapien
32	79	17.2	148	11 Q9QYD7	Q9qyd7 mus musculus
33	78	17.0	100	13 Q8QG55	Q8qg55 gallus gall
34	77.5	16.9	97	6 Q9RTS6	Q9rts6 bos taurus
35	75.5	16.5	99	6 Q9TTQ3	Q9ttq3 equus cabal
36	74.5	16.3	96	6 Q8SQB1	Q8sqb1 bos taurus
37	74	16.2	116	12 Q83145	Q83145 mouse cytom
38	74	16.2	280	12 Q9WQ82	Q9wq82 mouse cytom
39	73	15.9	97	6 Q9BDJ2	Q9bdj2 bos taurus
40	73	15.9	106	11 Q92292	Q92292 cricetus
41	71.5	15.6	395	11 Q91V44	Q91v44 mus musculus
42	68	14.8	86	11 Q9OX28	Q9ox28 mus musculus
43	67.5	14.7	96	13 Q90825	Q90825 gallus gall
44	67.5	14.7	114	12 P88968	P88968 kaposi's sa
45	67	14.6	76	11 Q9QUS5	Q9qus5 mus musculus

ALIGNMENTS

RESULT 1

Q9QZU2 ID Q9QZU2 PRELIMINARY; PRT; 92 AA.
AC Q9QZU2;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chanry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.
RL Blood 0:0-0(1999).
DR EMBL; AF163476; AAD55763.1;
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCV; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;

Query Match 64.4%; Score 295; DB 11; Length 92;

Best Local Similarity 58.7%; Pred. No. 3.2e-32;

Matches 54; Conservative 18; Mismatches 20; Indels 0; Gaps 0;

QY 1 MARLOTALEVLVLLVALQATEAGPYGNMDSVCCRDYVRLPLXVXHXWTSKSC 60

Db 1 MSNLRVLLVLLVALVAIQTSIDAGPYGNMDSVCCRDYVRLPLXVXHXWTSKSC 60

QY 61 PRGVVLLTFRDKXICADPRVPXXKMILNKLKLS 92

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Db      61 RKPGVLLTVKNRDICALDPRQVWVKLLHLKLS 92
      :|||||:|:::|||||:|:|:|
      12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTWSDSCPRPGVVLLTFR 71
      1 LVLLAVALQTSAGPYGANVEDSICCDYIRHPLPRFVKFYFTWTSKCRPGVVLLITIK 60
      72 DKXICADPRVPXKKMILNKLS 92
      61 NRDICADPRMLVWKILHLKLA 81

RESULT 2
Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65:
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1;
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 62.9%; Score 288; DB 11; Length 92;
Best Local Similarity 58.7%; Pred. No. 2.9e-31;
Matches 54; Conservative 16; Mismatches 22; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTWSDSC 60
DB 1 MATLEVPQLVALVLLVLLAVALQTSAGPYGANVEDSICCDYIRHPLPRFVKFYFTWTSK 50
QY 61 PRPGVLLTFRDKXICADPRVPXKKMILNKLS 92
DB 61 RKPGVLLTVKNRDICALDPRMLVWKILHLKLA 92

RESULT 3
Q90ZU1 PRELIMINARY; PRT; 81 AA.
AC Q90ZU1:
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
DE Macrophage-derived chemokine (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163477; AAD55764.1;
DR HSSP; Q98157; ICM9.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
FT NON_TER 1
SQ SEQUENCE 81 AA; 9212 MW; A0A7EDIA0045D80B CRC64;

Query Match 29.3%; Score 134; DB 11; Length 92;
Best Local Similarity 31.5%; Pred. No. 2.2e-10;
Matches 28; Conservative 20; Mismatches 39; Indels 2; Gaps 2;

QY 3 RLQATLLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTWSDSCPR 62
DB 2 KVPTAVLAVLCIITLCNQVFSAPYGAD-TPTFCFCFSYGR-QIPRKFADIYFTSSLCSE 59
QY 63 PGVLLTFRDKXICADPRVPXKKMILNKL 91
DB 60 PGIIFLTRNRHVCADPRWTWQEIITDL 88

RESULT 5
Q9PWA6 PRELIMINARY; PRT; 90 AA.
AC Q9PWA6:
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Chemokine.
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (APR-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF146730; AAD48772.1;

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DR HSP; P13236; IHUM.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ SEQUENCE 90 AA; 9986 MW; 50AF9679A26751CB CRC64;

Query Match      28.7%; Score 131.5; DB 13; Length 90;
Best Local Similarity 33.7%; Pred. No. 4.7e-10;
Matches 30; Conservative 19; Mismatches 37; Indels 3; Gaps 3;

Oy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSCP 62
Db 2 KVSVAALAVL-LIAICYQ-TSAAPVGDPPPTS-CCFTYISRLQPSFVADYETNSQC 58
Oy 63 PGVLLTFRDKXICADPRVXXKMLNKL 91
Db 59 AGVVFTIRKGEVCANPDWQVDMYMKM 87

RESULT 6
O910C9 PRELIMINARY; PRT; 90 AA.
AC O910C9;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1-beta.
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ243034; CAB45103.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match      28.5%; Score 130.5; DB 13; Length 90;
Best Local Similarity 33.7%; Pred. No. 6.4e-10;
Matches 30; Conservative 18; Mismatches 38; Indels 3; Gaps 3;

Oy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSCP 62
Db 2 KVSVAALAVL-LIAICYQ-TSAAPVGDPPPTS-CCFTYISRLQPSFVADYETNSQC 58
Oy 63 PGVLLTFRDKXICADPRVXXKMLNKL 91
Db 59 AGVVFTIRKGEVCANPDWQVDMYMKM 87

RESULT 7
O80G57 PRELIMINARY; PRT; 91 AA.
AC O80G57;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.

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OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21655115; PubMed=11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
RT chicken CC chemokines.";
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match      27.9%; Score 128; DB 13; Length 91;
Best Local Similarity 34.4%; Pred. No. 1.4e-09;
Matches 31; Conservative 18; Mismatches 37; Indels 4; Gaps 2;

Oy 4. LOTALLVLLVLLAVALQATEA--CPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSCP 61
Db 1 MMTAVAVSLSLILVLAALFPQASSPFGA--DTTCCFNYSVRKLPQNHHVKDYFTYSSKCP 58
Oy 62 RPYVLLTFRDKXICADPRVXXKMLNKL 91
Db 59 QAAVFTIRKGEVCANPDARWVKEYINFL 88

RESULT 8
O91ZLO PRELIMINARY; PRT; 92 AA.
AC O91ZLO;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match      27.8%; Score 127.5; DB 11; Length 92;
Best Local Similarity 34.8%; Pred. No. 1.7e-09;
Matches 31; Conservative 13; Mismatches 44; Indels 1; Gaps 1;

Oy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSCP 62
Db 2 KLCISTLALLLLAEFCAPVTSAPRGSDDPPTS-CCFSVASRKLPRNFVTDYETSSLCCK 60
Oy 63 PGVLLTFRDKXICADPRVXXKMLNKL 91
Db 61 PAVVFLTRKGEVCADPSQPVWVNEYNDL 89

RESULT 9
O98158 PRELIMINARY; PRT; 95 AA.
AC O98158; Q12569;
DT 01-FEB-1997 (TrEMBLrel. 02, Created)
DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;

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Db      65 FQTKGRQCVCANP 77

RESULT 14
Q96I68          PRELIMINARY;           PRT;             93 AA.
AC Q96I68;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Similar to small inducible cytokine A3 (homologous to mouse Mip-1a).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=B-CCELL;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC007783; AH07783.1; -.
DR InterPro; IPR000827; CC_chemkine_smI.
DR InterPro; IPR001811; Chemokine_IL8.
DE Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE   93 AA;  10144 MW;  A7A78E374006D61E CRC64;

Query Match               24.9%; Score 114; DB 4; Length 93;
Best Local Similarity     34.2%; Pred. No. 1.2e-07;
Matches    25; Conservative 13; Mismatches 33; Indels 2; Gaps 2;

Cy       7 ALLVVLVVLLVAALQAEGAGYGANNEDSVCRDYVRPLXVVYXHFXWTSDCSPRGCV 66
||| : || | : | | : | | : | | : | | : | | : | | : | | : | | : | | : |
Db       7 ALAVLLCTMALCNQLSA-LAAD-TPTACCFSYTSRQPQNFIADIFYETSSQCCKPSVI 64
||| : || | : | | : | | : | | : | | : | | : | | : | | : | | : | | : |

Cy       67 LLTRFKKICADP 79
||| : || | : | | : | | : | | : | | : | | : | | : | | : | | : | | : |
Db       65 FLTKGRQCVCADP 77


RESULT 15
Q9NUZ6          PRELIMINARY;           PRT;             93 AA.
ID Q9NUZ6;
AC AC Q9NUZ6;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Thymus and activation-regulated chemokine precursor (Small inducible DE cytokine subfamily AL7).
GN TARC OR ABCD-2 OR SCYA17.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C3H/EBF/J;
RA Lieberman I., Foster J.;
RT "The murine b-chemokine TARC is expressed by subsets of dendritic RT cells and attracts primed CD4+ T cells.";
RL Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases. RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RX MEDLINE=99438049; PubMed=10508268;
RA Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F., RA Rolink A.G.;
RT "Three chemokines with potential functions in T lymphocyte-independent RT and -dependent B lymphocyte stimulation.";
RL Eur. J. Immunol. 29:2934-2947(1999). RN [3]
RP SEQUENCE FROM N.A.
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PC STRAIN-C57BL/6J: TISSUE-PANCREAS;
RX MEDLINE-21085660; PubMed-11217851;
RA Arawaka T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nkaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.,
RT "Functional annotation of a full-length mouse cDNA collection."
RL Nature 409:685-690(2001).
RN [4]
RP SEQUENCE FROM N.A.
RC TISSUE=THYMUS GLAND;
RA Strausberg R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ242587; CAB45256.1; -;
DR EMBL; AF125572; RAD56602.1; -;
DR EMBL; AF125571; RAD56601.1; -;
DR EMBL; AK007663; BAB25171.1; -;
DR EMBL; BC028505; RAH28505.1; -;
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1329039; Scyal7.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT SIGNAL 1 20
FT CHAIN 21 93 THYMUS AND ACTIVATION-REGULATED
FT CHEMOKINE.
SQ SEQUENCE 93 AA; 10466 MW; 6EFCDAFDEBEECCCE CRC64;

Query Match 24.8%; Score 113.5; DB 11; Length 93;
Best Local Similarity 35.3%; Pred. No. 1.3e-07;
Matches 30; Conservative 10; Mismatches 32; Indels 13; Gaps 2;

QY 1 MARLQTAALLVVLV-----LAVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFYXW 55
Db 1 MRSLOMLLLAALLGTFLQHARAARATNVG-----RECCLDYFKGAIPTRKLVSWYK 52

QY 56 TSDSCPRPGVWLTFRDKXICADPR 80
Db 53 TSVECSRDAIVFLTVQGLKICADPK 77

Search completed: July 28, 2003, 04:02:52
Job time : 18.1933 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.2941 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165a-30

Perfect score: 390

Sequence: 1 LGPYGANMEDSVCCRDYRY.....EICADPRVWVRMILNKLSQ 70

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_101002:**
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15: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:**
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18: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1997.DAT:**
19: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:**
20: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:**
21: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:**
22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:**
23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	18 AAW20060	Human macrophage d
2	390	100.0	70	20 AAY24413	Macrophage derived
3	390	100.0	70	20 AAY05873	Human macrophage-d
4	388	99.5	172	20 AAY29895	Human MDC and huma
5	388	99.5	334	20 AAY29904	Human MDC and huma
6	388	99.5	597	20 AAY29900	Human MDC and HIV-
7	388	99.0	69	23 AAY20022	Human chemokine MD
8	386	99.0	69	23 AAO14155	Human MDC protein.
9	386	99.0	86	19 AAW59432	Human chemokine pr
10	386	99.0	93	18 AAW20058	Macrophage derived

11	386	99.0	93	19 AAW62783	Amino acid sequenc
12	386	99.0	93	19 AAW59433	Human chemokine pr
13	386	99.0	93	19 AAW40811	Macrophage-derived
14	386	99.0	93	20 AAY26175	Macrophage-derived
15	386	99.0	93	20 AAY24414	Human macrophage d
16	386	99.0	93	20 AAY05871	Human macrophage-d
17	386	99.0	93	20 AAY06829	Macrophage derived
18	386	99.0	93	21 AAB07500	A human monokine d
19	386	99.0	93	23 AAO14046	Human macrophage-d
20	386	99.0	154	20 AAY05878	Yeast pre-pro-alpha
21	381	97.7	93	18 AAW07604	Cytokine beta-13 s
22	381	97.7	93	19 AAW57881	Human chemokine be
23	381	97.7	93	22 AAB68352	Amino acid sequenc
24	380	97.4	68	18 AAW17668	Stem cell mobilisi
25	377	96.7	93	20 AAY05879	Human macrophage-d
26	376	96.4	93	20 AAY05880	Macaque macrophage
27	374	95.9	69	18 AAW20061	Human macrophage d
28	374	95.9	69	20 AAY24415	Macrophage derived
29	374	95.9	69	20 AAY05874	Human macrophage-d
30	362	92.8	69	18 AAW20062	Human macrophage d
31	362	92.8	69	20 AAY24416	Macrophage derived
32	362	92.8	69	20 AAY05875	Human macrophage-d
33	342	87.7	93	18 AAW20059	Human macrophage d
34	342	87.7	93	20 AAY24417	Macrophage derived
35	342	87.7	93	20 AAY05872	Human macrophage-d
36	270	69.2	473	22 AAB61797	Chimeric chemokine
37	268	68.7	68	22 AAB61808	Murine MDC mature
38	268	68.7	68	23 AAG78392	Mouse chemokine mM
39	268	68.7	68	23 AAG68355	Murine chemokine m
40	268	68.7	92	19 AAW59434	Mouse chemokine pr
41	268	68.7	92	20 AAY05876	Mouse macrophage-d
42	265	67.9	81	20 AAY05877	Rat macrophage-der
43	214.5	55.0	67	23 AAG78396	Human/mouse hybrid
44	214.5	55.0	67	23 AAG68359	Chimeric chemokine
45	213	54.6	37	22 ABB39053	Peptide #6559 enco

ALIGNMENTS

RESULT 1
AAW20060
ID AAW20060 standard; Protein; 70 AA.
XX
AC AAW20060;
XX
DT 11-SEP-1997 (first entry)
XX
Human macrophage derived chemokine analogue.
DE
DE
KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX
XX Synthetic.
OS
OS XX
PN WO9640923-A1.
XX
PD 19-DEC-1996.
PF
PF XX
XX 07-JUN-1996; 96WO-US10114.
XX
PR 16-NOV-1995; 95US-0558658.
PR 07-JUN-1995; 95US-0479620.
XX
XX (ICOS-) ICOS CORP.
XX
XX Godiska R, Gray PW;
XX
XX WPI; 1997-052324/05.
XX
XX Macrophage derived chemokine (MDC) and analogues - used in the
PT treatment of inflammatory diseases, MDC antibodies used to treat

CC Crohn's disease, rheumatoid arthritis, etc.
 CC Claim 25; Page 83; 106pp; English.
 CC A new macrophage derived chemokine, MDC, a member of the C-C-
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and in the
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 CC
 XX SQ Sequence 70 AA;
 Query Match 100.0%; Score 390; DB 18; Length 70;
 Best Local Similarity 100.0%; Pred. No. 3e-41;
 Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 QY 61 VKMILNKLQ 70
 Db 61 VKMILNKLQ 70
 RESULT 2
 AAY24413
 ID AAY24413 standard; peptide; 70 AA.
 AC AAY24413;
 XX 24-SEP-1999 (first entry)
 DE Macrophage derived chemokine analogue MDC (n+1).
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 OS Homo sapiens.
 OS Synthetic.
 XX US5932703-A.
 XX 03-AUG-1999.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1995; 95US-0479620.
 XX 16-NOV-1995; 95US-0558658.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1999-443621/37.
 XX Macrophage derived chemokine analogues useful for inhibiting
 XX macrophage derived chemokine-induced chemotaxis
 XX Claim 1; Column 59; 43pp; English.
 XX The present sequence represents a macrophage derived chemokine (MDC)
 XX analogue. The MDC analogue is capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogue may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX SQ Sequence 70 AA;
 Query Match 100.0%; Score 390; DB 20; Length 70;
 Best Local Similarity 100.0%; Pred. No. 3e-41;
 Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 QY 61 VKMILNKLQ 70
 Db 61 VKMILNKLQ 70
 RESULT 3
 AAY05873
 ID AAY05873 standard; Protein; 70 AA.
 XX AC AAY05873;
 XX 02-AUG-1999 (first entry)
 DE Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
 KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.
 XX Homo sapiens.
 OS Synthetic.
 XX WO9915666-A2.
 XX 01-APR-1999.
 XX 28-SEP-1998; 98WO-US20270.
 XX 28-APR-1998; 98US-0067447.
 XX 26-SEP-1997; 97US-0939107.
 XX (ICOS-) ICOS CORP.
 XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 XX WPI; 1999-254715/21.
 XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 XX Example 11; Page 134; 147pp; English.
 XX The present sequence represents synthetic analogue MDC(n+1) of the
 XX novel human macrophage derived C-C chemokine MDC (see also AAY05871).
 XX MDC(n+1) consists of a Leu residue following by amino acid residues
 XX 1-69 of the MDC mature polypeptide. The analogue is expected to be
 XX an antagonist of MDC activity, inhibiting activity by competitively
 XX binding to the receptor that recognises MDC or by forming inactive
 XX heterodimers with MDC. MDC antagonists are used in claimed methods
 XX for the preparation of medicaments for the suppression of the
 XX proliferation of a mammalian immunodeficiency virus, for inhibiting
 XX platelet aggregation in a mammal, for the treatment or palliation
 XX of lupus erythematosus in a mammal, for inhibiting MDC-induced
 XX activation, chemotaxis or proliferation of cells that express CCR4,
 XX for inhibiting or palliating an allergic reaction in a mammal, and
 XX for treating asthma.


```

XX SQ Sequence 70 AA;
Query Match 100.0%; Score 390; DB 20; Length 70;
Best Local Similarity 100.0%; Pred. No. 3e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70
:|||||

RESULT 4
AAY29895
ID AAY29895 standard; Protein: 172 AA.
XX
AC AAY29895;
DT 17-NOV-1999 (first entry)
XX Human MDC and human Muc-1 fusion protein.
DE Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW Immune response; HIV; infection.
XX Homo sapiens.
OS Synthetic.
XX WO9946392-A1.
PN 16-SEP-1999.
PD 12-MAR-1999; 99WO-US05345.
XX 12-MAR-1998; 98US-0077745.
PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA Kwak LW, Biragyn A;
PI WPI; 1999-551418/46.
DR New fusion polypeptides comprising a chemokine and a tumour antigen or
XX HIV antigen, used for treating cancers or treating or preventing HIV
PT infection -
PS Claim 11; Page 129-130; 142pp; English.
XX
CC The present invention describes fusion proteins comprising a chemokine
CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human
CC Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC be used for producing an immune response, e.g. an effector T cell immune
CC response. They can also be used for treating cancer or treating or
CC preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC can be used in in vitro diagnostic assays, as well as in screening assays
CC for identifying unknown tumour antigen epitopes and fine mapping of
CC tumour antigen epitopes. The present sequence represents a specifically
CC claimed fusion protein from the present invention.
XX
SQ Sequence 172 AA;
Query Match 99.5%; Score 388; DB 20; Length 172;
Best Local Similarity 98.6%; Pred. No. 1.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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```

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70
:|||||

RESULT 5
AAY29904
ID AAY29904 standard; Protein: 334 AA.
XX
AC AAY29904;
DT 17-NOV-1999 (first entry)
XX Human MDC and human scFV fusion protein.
DE Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW Immune response; HIV; infection.
XX Homo sapiens.
OS Synthetic.
XX WO9946392-A1.
PN 16-SEP-1999.
PD 12-MAR-1999; 99WO-US05345.
XX 12-MAR-1998; 98US-0077745.
PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA Kwak LW, Biragyn A;
PI WPI; 1999-551418/46.
DR New fusion polypeptides comprising a chemokine and a tumour antigen or
XX HIV antigen, used for treating cancers or treating or preventing HIV
PT infection -
PS Claim 73; Page 134-135; 142pp; English.
XX
CC The present invention describes fusion proteins comprising a chemokine
CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human
CC Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC be used for producing an immune response, e.g. an effector T cell immune
CC response. They can also be used for treating cancer or treating or
CC preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC can be used in in vitro diagnostic assays, as well as in screening assays
CC for identifying unknown tumour antigen epitopes and fine mapping of
CC tumour antigen epitopes. The present sequence represents a specifically
CC claimed fusion protein from the present invention.
XX
SQ Sequence 334 AA;
Query Match 99.5%; Score 388; DB 20; Length 334;
Best Local Similarity 98.6%; Pred. No. 2.9e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||

```

```
Db      61 VKMLNKLKLSQ 70
|||||
RESULT 6
AA29900
ID AAY29900 standard; Protein; 587 AA.
XX
AC AAY29900;
XX
DT 17-NOV-1999 (first entry)
XX
DE Human MDC and HIV-1 gp120 fusion protein.
XX
KW Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW Immune response; HIV; infection.
XX
OS Homo sapiens.
OS Human Immunodeficiency virus type 1.
OS Synthetic.
XX
PN WO9946392-A1.
XX
PD 16-SEP-1999.
XX
PF 12-MAR-1999; 99WO-US05345.
XX
PR 12-MAR-1998; 98US-0077745.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Kwak LW, Biragyn A;
XX
DR WPI; 1999-551418/46.
XX
PT New fusion polypeptides comprising a chemokine and a tumour antigen or
PT HIV antigen, used for treating cancers or treating or preventing HIV
PT infection -
XX
PS Claim 50; Page 130-131; 142pp; English.
XX
CC The present invention describes fusion proteins comprising a chemokine
CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC comprise: (1) human monocyte chemoattractant protein-3 (MCP-3) and human
CC Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC be used for producing an immune response, e.g. an effector T cell immune
CC response. They can also be used for treating cancer or treating or
CC preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC can be used in in vitro diagnostic assays, as well as in screening assays
CC for identifying unknown tumour antigen epitopes and fine mapping of
CC tumour antigen epitopes. The present sequence represents a specifically
CC claimed fusion protein from the present invention.
XX
SQ Sequence 587 AA;
Query Match 99.5%; Score 388; DB 20; Length 587;
Best Local Similarity 98.6%; Pred. No. 5.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
Db 1 MGYPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
QY 61 VKMLNKLKLSQ 70
Db 61 VKMLNKLKLSQ 70
|||||
RESULT 7
AA20022
ID AAO20022 standard; protein; 69 AA.
XX
AC AAO20022;
XX
DT 11-JUN-2002 (first entry)
XX
DE Human chemokine MDC protein.
XX
KW Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
KW antiarteriosclerotic; dermatological; antiinflammatory; antiallergic;
KW immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
KW AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
KW atheroma; atherosclerosis; organ transplant rejection; MDC.
XX
OS Homo sapiens.
XX
PN WO200204015-A1.
XX
PD 17-JAN-2002.
XX
PF 12-JUL-2001; 2001WO-US21933.
XX
PR 12-JUL-2000; 2000US-217683P.
XX
PA (GRYP-) GRYPHON SCI.
XX
PI Kochendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;
XX
DR WPI; 2002-268857/31.
XX
PT New polymer-modified bioactive synthetic chemokines useful in the
PT treatment of various diseases or disorders e.g. asthma -
XX
PS Disclosure; Fig 10C; 176pp; English.
XX
CC The invention relates to polymer-modified bioactive synthetic chemokines
CC and to methods for their production and use. The compounds and methods of
CC the backbone of the invention are useful in the analysis and treatment of
CC various diseases states e.g. HIV and AIDS related disorders, asthma,
CC allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
CC transplant rejection, and rheumatoid arthritis. This sequence represents
CC the human chemokine MDC protein of the invention.
XX
SQ Sequence 69 AA;
Query Match 99.0%; Score 386; DB 23; Length 69;
Best Local Similarity 100.0%; Pred. No. 9.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
Db 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
QY 62 KMLNKLKLSQ 70
Db 61 KMLNKLKLSQ 69
|||||
RESULT 8
AAO14155
ID AAO14155 standard; protein; 69 AA.
XX
AC AAO14155;
XX
DT 25-APR-2002 (first entry)
XX
DE Human MDC protein.
XX
KW Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
KW asthma; allergic rhinitis; atopic dermatitis; atheroma; antiinflammatory;
KW antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
KW antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
```

KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.
XX Homo sapiens.
OS
PN WO200204499-A1.
XX
PD 17-JAN-2002.
XX
XX 12-JUL-2001; 2001WO-US21934.
XX
XX 12-JUL-2000; 2000US-217683P.
XX
XX (GRYP-) GRYPHON SCI.
XX
XX Offord R, Gaertner H, Hartley O;
XX
XX WPI; 2002-171703/22.
XX
XX Chemokine receptor modulator useful for treating e.g. asthma, allergic
PT rhinitis comprises a chemically modified carboxyl-terminus and/or amino
PT terminus analogs.
XX
XX Example 3; Fig 2; 86pp; English.
XX
XX The present invention relates to chemokine receptor modulators, which
CC comprise a chemokine polypeptide chain modified at N-terminus with an
CC aliphatic chain and at least one amino acid derivatives and/or modified
CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
CC can be used to treat diseases such as HIV infection, AIDS, asthma,
CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
CC transplant rejection and rheumatoid arthritis. The present sequence is
CC the human MDC protein.
XX
XX Sequence 69 AA;
SQ
Query Match 99.0%; Score 386; DB 23; Length 69;
Best Local Similarity 100.0%; Pred. NO. 9.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 61
DB 1 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 60
QY 62: KMILNLSQ 70
DB 61 KMILNLSQ 69
RESULT 9
AAW59432
ID AAW59432 standard; Protein; 86 AA.
XX
AC AAW59432;
XX
XX 27-AUG-1998 (first entry)
DT
XX Human chemokine protein 331D5 from CD1a+ cDNA library.
DE
XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
KW degenerative condition; abnormal proliferation; regeneration;
KW degeneration; atrophy.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH Peptide 1..15
FT /label= signal
FT /note= "partial signal sequence"
FT Protein 16..86
FT /label= chemokine protein 331D5
XX
XX WO9811226-A2.
PN
XX

PD 19-MAR-1998.
XX
XX 09-SEP-1997; 97WO-US15315.
XX
PR 10-SEP-1996; 96US-0025724.
XX
XX (SCHE) SCHERING CORP.
XX
XX Gorman DM, Hedrick JA, Zlotnik A;
XX
XX WPI; 1998-207387/18.
DR N-PSDB; AAV34996.
XX
XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions
XX
XX Disclosure; Page 75; 82pp; English.
XX
XX This sequence represents a novel human chemokine protein, 331D5 which has
CC been isolated from a 90 per cent cDNA library and obtained by
CC random sequencing. Nucleic acid sequences encoding the chemokines can be
CC used for detection, in e.g. forensic techniques. Antibodies and other
CC binding agents may be used in diagnostics. The chemokines themselves are
CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
CC proliferation, regeneration, degeneration or atrophy may be treated by
CC the inventive compositions.
XX
XX Sequence 86 AA;
SQ
Query Match 99.0%; Score 386; DB 19; Length 86;
Best Local Similarity 100.0%; Pred. NO. 1.2e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 61
DB 18 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 77
QY 62 KMILNLSQ 70
DB 78 KMILNLSQ 86
RESULT 10
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX
AC AAW20058;
XX
XX 11-SEP-1997 (first entry)
DT
XX Macrophage derived chemokine for treating inflammation.
DE
XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH Peptide 1..24
FT /label= sig_peptide
FT Protein 25..93
FT /label= mat_protein
XX
XX WO9640923-A1.
PN
XX
XX 19-DEC-1996.
PD
XX
XX 07-JUN-1996; 96WO-US10114.
PF
XX
XX 16-NOV-1995; 95US-0558658.
PR
XX 07-JUN-1995; 95US-0479620.
XX

PA (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and it's analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPWV 84
 QY 62 KMILNKLQ 70
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 AC AAW62783;
 DT 24-SEP-1998 (first entry)
 XX Amino acid sequence of human STCP-1.
 XX Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX Homo sapiens.
 OS WO9824907-A1.
 PN 11-JUN-1998.
 PD 26-NOV-1997; 97WO-US21552.
 XX 03-DEC-1996; 96US-0760127.
 PR (AMGE-) AMGEN INC.
 PA Andrew DP; Chang M;
 XX WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX Human STCP-1 polypeptides with chemokine activity - useful e.g. to

PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells
 XX Claim 1; Fig 2A-F; 96pp; English.
 PS
 XX The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPWV 61
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPWV 84
 QY 62 KMILNKLQ 70
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 AC AAW59433;
 DT 27-AUG-1998 (first entry)
 XX Human chemokine protein 331D5.
 DE Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX Homo sapiens.
 OS WO9811226-A2.
 PN 19-MAR-1998.
 PD 09-SEP-1997; 97WO-US15315.
 XX 10-SEP-1996; 96US-0025724.
 PR (SCHE) SCHERING CORP.
 PA Gorman DM, Hedrick JA, Zlotnik A;
 XX WPI; 1998-207387/18.
 DR N-PSDB; AAV34997.
 XX

PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 XX cancer and degenerative conditions
 PS Claim 1; Page 78; 82pp; English.
 CC This sequence represents a novel human chemokine protein, 331D5.
 CC Nucleic acid sequences encoding the chemokines can be used for detection,
 CC in e.g. forensic techniques. Antibodies and other binding agents may be
 CC used in diagnostics. The chemokines themselves are useful for treatment
 CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
 CC regeneration, degeneration or atrophy may be treated by the inventive
 CC compositions.
 XX
 XX Sequence 93 AA;
 SQ Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
 OY 62 KMILNKLSQ 70
 DB 85 KMILNKLSQ 93
 RESULT 13
 AAW40811
 ID AAW40811 standard; Protein; 93 AA.
 XX
 AC AAW40811;
 XX
 DT 01-APR-1998 (first entry)
 XX
 DE Macrophage-derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "leader peptide"
 FT Protein 25..93
 FT Protein /note= "mature protein"
 XX
 PN US5688927-A.
 XX
 PD 18-NOV-1997.
 XX
 PF 07-JUN-1995; 95US-0480449.
 XX
 PR 07-JUN-1995; 95US-0480449.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 WPI: 1998-008038/01.
 DR N-PSDB; AAT9233.
 XX
 PT Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity
 XX
 PS Claim 3; Column 21-24; 22pp; English.
 XX
 CC This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.
 XX
 XX Sequence 93 AA;
 SQ Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
 OY 62 KMILNKLSQ 70
 DB 85 KMILNKLSQ 93
 RESULT 14
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 AC AAY26175;
 XX
 DT 29-SEP-1999 (first entry)
 XX
 DE Macrophage-derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "signal peptide"
 FT Protein 25..93
 FT Protein /note= "mature macrophage-derived chemokine"
 XX
 PN WO9929728-A1.
 XX
 PD 17-JUN-1999.
 XX
 PF 11-DEC-1998; 98WO-US26291.
 XX
 PR 11-DEC-1997; 97US-0069281.
 XX
 PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A;
 XX
 WPI: 1999-385578/32.
 DR N-PSDB; AAX80630.
 XX
 PT Methods of enhancing vaccine efficacy
 XX
 PS Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 XX
 CC The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

SQ Sequence 93 AA;

Query Match 99.0%; Score 386; DB 20; Length 93;

Best Local Similarity 100.0%; Pred. No. 1.3e-40; Mismatches 0; Indels 0; Gaps 0;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 61

Db 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 84

QY 62 KMILNKLSQ 70

Db 85 KMILNKLSQ 93

RESULT 15

AAAY24414

ID AAY24414 standard; Protein; 93 AA.

AC AAY24414;

XX 24-SEP-1999 (first entry)

DT Human macrophage derived chemokine.

DE

XX

KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;

KW inflammation; immune response; inflammatory disorder; Crohn's disease;

KW atherosclerosis; arthritis; pulmonary fibrosis.

XX Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide 1..24

FT Protein /label= signal

FT 25..93

FT /label= MDC

XX US5932703-A.

PN

XX 03-AUG-1999.

PD

XX 07-JUN-1996; 96US-0660542.

PF

XX 07-JUN-1996; 96US-0660542.

PR 07-JUN-1995; 95US-0479620.

PR 16-NOV-1995; 95US-0558658.

XX (ICOS-) ICOS CORP.

PA

XX Godiska R, Gray PW;

PI

XX WPI: 1999-443621/37.

DR N-PSDB; AAY90162.

DR

XX Macrophage derived chemokine analogues useful for inhibiting

PT Macrophage derived chemokine-induced chemotaxis

XX

PS Claim 2; Column 41-43; 43pp; English.

XX

CC The present invention describes macrophage derived chemokine (MDC)

CC analogues which are capable of inhibiting MDC induced chemotaxis.

CC Therefore, the MDC analogues may be used to modulate inflammatory and

CC immune responses allowing for the treatment of disorders associated

CC with excessive inflammation or overactive immune responses. Inflammatory

CC disorders which may be treated in this way include Crohn's disease

CC (manifested by chronic inflammation of the bowel), atherosclerosis,

CC arthritis and pulmonary fibrosis. The present sequence represents human

CC MDC.

XX

SQ Sequence 93 AA;

Query Match

Best Local Similarity

Matches 69; Conservative

0; Mismatches 0; Indels

0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 61

Db 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPWV 84

QY 62 KMILNKLSQ 70

Db 85 KMILNKLSQ 93

Search completed: July 28, 2003, 04:04:46

Job time : 15.2941 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 : Search time 5.88235 Seconds
(without alignments)
350.133 Million cell updates/sec

Title: US-09-509-165A-30
Perfect score: 390
Sequence: 1 LGPYCANMEDSVCCRDYVRY.....EICADPRVPWVKMILNLSQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 2942292 residues
Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	2	US-08-660-542-30
2	386	99.0	93	1	US-08-480-449-2
3	386	99.0	93	2	US-08-660-542-2
4	386	99.0	93	4	US-09-232-878-6
5	386	99.0	93	4	US-08-479-603-2
6	386	99.0	93	5	PCT-US95-07294-2
7	374	95.9	69	2	US-08-660-542-31
8	362	92.8	69	2	US-08-660-542-32
9	342	87.7	93	4	US-09-230-637-25
10	153	39.2	95	4	US-09-230-637-26
11	145	37.2	89	1	US-08-208-339A-4
12	145	37.2	89	3	US-08-722-719-6
13	143	36.7	70	4	US-09-334-951-65
14	143	36.7	89	4	US-09-334-951-6
15	141	36.2	78	1	US-08-375-346A-6
16	141	36.2	78	2	US-08-467-123B-6
17	139.5	35.8	94	4	US-09-230-371A-21
18	137	35.1	68	4	US-09-141-833-5
19	135	34.6	68	2	US-08-936-387-17
20	135	34.6	69	4	US-08-836-922-3
21	135	34.6	76	4	US-08-836-922-20
22	133	34.1	68	2	US-08-936-387-18
23	133	34.1	69	4	US-08-836-922-2
24	133	34.1	74	2	US-08-450-905B-18
25	131	33.6	67	4	US-09-141-833-2
26	131	33.6	68	2	US-08-936-387-1
27	131	33.6	68	2	US-08-615-232A-11

28	131	33.6	68	3	US-08-470-323-11	Sequence 11, Appl
29	131	33.6	68	4	US-08-836-922-1	Sequence 1, Appl
30	131	33.6	68	4	US-09-141-833-1	Sequence 1, Appl
31	131	33.6	69	3	US-07-982-759F-18	Sequence 18, Appl
32	131	33.6	69	4	US-08-836-922-4	Sequence 4, Appl
33	131	33.6	70	2	US-08-716-188-7	Sequence 7, Appl
34	131	33.6	73	2	US-08-936-387-13	Sequence 13, Appl
35	131	33.6	90	4	US-09-230-637-40	Sequence 40, Appl
36	131	33.6	91	1	US-08-347-492B-12	Sequence 12, Appl
37	131	33.6	91	1	US-08-375-346A-5	Sequence 5, Appl
38	131	33.6	91	1	US-08-480-449-21	Sequence 21, Appl
39	131	33.6	91	2	US-08-633-682-3	Sequence 3, Appl
40	131	33.6	91	2	US-08-421-144A-8	Sequence 8, Appl
41	131	33.6	91	2	US-08-660-542-21	Sequence 21, Appl
42	131	33.6	91	2	US-08-798-143-12	Sequence 12, Appl
43	131	33.6	91	2	US-08-467-123B-5	Sequence 5, Appl
44	131	33.6	91	3	US-08-936-772-3	Sequence 3, Appl
45	131	33.6	91	4	US-08-836-922-14	Sequence 14, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-30
: Sequence 30, Application US/08660542
: Patent No. 5932703
: GENERAL INFORMATION:
: APPLICANT: Godiska, Ronald
: APPLICANT: Gray, Patrick W.
: TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
: TITLE OF INVENTION: ANALOGS
: NUMBER OF SEQUENCES: 32
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
: STREET: 6300 Sears Tower, 233 South Wacker Drive
: CITY: Chicago
: STATE: Illinois
: COUNTRY: United States of America
: ZIP: 60606-6402
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/660,542
: FILING DATE:
: CLASSIFICATION: 514
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/558,658
: FILING DATE: 16-NOV-1995
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/479,620
: FILING DATE: 07-JUN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: Gass, David A.
: REGISTRATION NUMBER: 38,153
: REFERENCE/DOCKET NUMBER: 27866/33318
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 312/474-6300
: TELEFAX: 312/474-0448
: TELEX: 25-3856
: INFORMATION FOR SEQ ID NO: 30:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 70 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
US-08-660-542-30

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Best Local Similarity 100.0%; Pred. No. 2.1e-43;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 61 VKMLNKLSQ 70

RESULT 2
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 5688927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE:
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/480,449
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-480-449-2

Query Match 99.0%; Score 386; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 85 KMILNKLSQ 93

RESULT 3
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
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; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-660-542-2

Query Match 99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 62 KMILNKLSQ 70
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Db 85 KMILNKLSQ 93

RESULT 4
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
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US-09-232-878-6

Query Match 99.0%; Score 386; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 5

US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-603-2

Query Match 99.0%; Score 386; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 61
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 6

PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:

; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; PCT-US95-07294-2

Query Match 99.0%; Score 386; DB 5; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 61
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 7

US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE: 514
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-31

Query Match 95.9%; Score 374; DB 2; Length 69;
Best Local Similarity 97.1%; Pred. No. 2.4e-41;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHYWTSDCPRPGVLLTFRDKEICADPRVPWV 61
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVKKHYWTSDCPRPGVLLTFRDKEICADPRVPYL 60
Qy 62 KMILNKLSQ 70
Db 61 KMILNKLSQ 69

RESULT 8
US-08-660-542-32
Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-32
Query Match 92.8%; Score 362; DB 2; Length 69;
Best Local Similarity 94.2%; Pred. No. 8.6e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Qy 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHYWTSDCPRPGVLLTFRDKEICADPRVPWV 61
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVKKHYWTSDCPRPGVLLTFRDKEICADPRVPWV 60
Qy 62 KMILNKLSQ 70
Db 61 KMILNKLSQ 69
RESULT 9
US-08-660-542-25
Sequence 25, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids

;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
;; FEATURE:
;; NAME/KEY: Protein
;; LOCATION: 1..69

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
;; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
;; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
;; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
;; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
;; OTHER INFORMATION: and methionine."

;; FEATURE:

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 27 is independently
;; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
;; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
;; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
;; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
;; OTHER INFORMATION: and methionine."

;; FEATURE:

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 30 is independently
;; OTHER INFORMATION: selected from the group consisting of tyrosine,
;; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
;; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."

;; FEATURE:

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 50 is independently
;; OTHER INFORMATION: selected from the group consisting of glutamic acid,
;; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."

;; FEATURE:

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 59 is independently
;; OTHER INFORMATION: selected from the group consisting of tryptophan,
;; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
;; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."

;; FEATURE:

;; NAME/KEY: misc_feature

;; OTHER INFORMATION: /note="The amino acid at position 60 is independently
;; OTHER INFORMATION: selected from the group consisting of valine, serine,
;; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
;; OTHER INFORMATION: asparagine, glutamine, and cysteine."

US-08-660-542-25

Query Match 87.7%; Score 342; DB 2; Length 93;

Best Local Similarity 91.3%; Pred. No. 4.7e-37;

Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRRYVRLPLRVVVKHYFTSDSCPRPGVLLTFRDKKEICADRPVW 61

DB 25 GPYGANMEDSVCCRRYVRLPLRVVVKHYFTSDSCPRPGVLLTFRDKKEICADRPVW 84

QY 62 KWLNLKLSQ 70

DB 85 KWLNLKLSQ 93

RESULT 10

US-09-230-637-26

;; Sequence 26, Application US/09230637

;; Patent No. 6264958

;; GENERAL INFORMATION:

;; APPLICANT: Hayward, Gary

;; APPLICANT: Nicholas, John
;; APPLICANT: Hardwick, J. Marie
;; APPLICANT: Reitz, Marvin
;; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
;; TITLE OF INVENTION: Associated Herpesvirus
;; FILE REFERENCE: 1107.78372

;; CURRENT APPLICATION NUMBER: US/09/230,637

;; PRIOR FILING DATE: 1999-11-23

;; PRIOR APPLICATION NUMBER: 60/022,591

;; PRIOR FILING DATE: 1996-07-25

;; PRIOR APPLICATION NUMBER: PCT US 97/12931

;; PRIOR FILING DATE: 1997-07-24

;; NUMBER OF SEQ ID NOS: 62

;; SOFTWARE: FastSeq for Windows Version 4.0

;; SEQ ID NO 26

;; LENGTH: 95

;; TYPE: PRT

;; ORGANISM: Kaposi's sarcoma-associated herpes-like virus

US-09-230-637-26

Query Match 39.2%; Score 153; DB 4; Length 95;

Best Local Similarity 42.9%; Pred. No. 1.4e-12;

Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

QY 13 CCRDYVRYRLPLRVVVKHYFTSDSCPRPGVLLTFRDKKEICADRPVWVKMLNLK 68

DB 36 CCYGFQHPPPVQILKEWYPTSPACPKGVILLTKRGQICADPSKNWVQLMQRL 91

RESULT 11

US-08-208-339A-4

;; Sequence 4, Application US/08208339A

;; Patent No. 5504003

;; GENERAL INFORMATION:

;; APPLICANT: LI, ET AL.

;; TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4

;; NUMBER OF SEQUENCES: 4

;; CORRESPONDENCE ADDRESS:

;; ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,

;; ADDRESSEE: CECCHI, STEWART & OLSTEIN

;; STREET: 6 BECKER FARM ROAD

;; CITY: ROSELAND

;; STATE: NEW JERSEY

;; COUNTRY: USA

;; ZIP: 07068

;; COMPUTER READABLE FORM:

;; MEDIUM TYPE: 3.5 INCH DISKETTE

;; COMPUTER: IBM PS/2

;; OPERATING SYSTEM: MS-DOS

;; SOFTWARE: WORD PERFECT 5.1

;; CURRENT APPLICATION DATA:

;; APPLICATION NUMBER: US/08/208,339A

;; FILING DATE: 8 MARCH 1994

;; CLASSIFICATION: 435

;; PRIOR APPLICATION DATA:

;; APPLICATION NUMBER:

;; FILING DATE:

;; ATTORNEY/AGENT INFORMATION:

;; NAME: FERRARO, GREGORY D.

;; REGISTRATION NUMBER: 36,134

;; REFERENCE/DOCKET NUMBER: 325800-77

;; TELECOMMUNICATION INFORMATION:

;; TELEPHONE: 201-994-1700

;; TELEFAX: 201-994-1744

;; INFORMATION FOR SEQ ID NO: 4:

;; SEQUENCE CHARACTERISTICS:

;; LENGTH: 89 AMINO ACIDS

;; TYPE: AMINO ACID

;; STRANDEDNESS:

;; TOPOLOGY: LINEAR

;; MOLECULE TYPE: PROTEIN

US-08-208-339A-4

Query Match 37.2%; Score 145; DB 1; Length 89;
Best Local Similarity 40.6%; Pred. No. 1.4e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSYCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 24 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTKRGRQICADPNKKWKY 81
| | | | | : : : : : | | | | | : : : : : | | :
QY 65 LNK 68
| | | | | : : : : : | | | | | : : : : : | | :
Db 82 ISDL 85

RESULT 12
US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.
; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-722-719-6

Query Match 37.2%; Score 145; DB 3; Length 89;
Best Local Similarity 40.6%; Pred. No. 1.4e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSYCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 24 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTKRGRQICADPNKKWKY 81
| | | | | : : : : : | | | | | : : : : : | | :
QY 65 LNK 68
| | | | | : : : : : | | | | | : : : : : | | :
Db 82 ISDL 85

RESULT 13
US-09-334-951-65
; Sequence 65, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: 1488.033000B
; CURRENT APPLICATION NUMBER: US/09/334,951
; EARLIER FILING DATE: 1999-06-17
; EARLIER APPLICATION NUMBER: US 08/208,339
; EARLIER FILING DATE: 1994-03-08
; EARLIER APPLICATION NUMBER: US 08/446,881
; EARLIER FILING DATE: 1995-05-05
; EARLIER APPLICATION NUMBER: US 08/465,682
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver: 2.0
; SEQ ID NO 65
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-65

Query Match 36.7%; Score 143; DB 4; Length 70;
Best Local Similarity 40.6%; Pred. No. 1.9e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSYCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 5 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTKRGRQICADPNKKWKY 62
| | | | | : : : : : | | | | | : : : : : | | :
QY 65 LNK 68
| | | | | : : : : : | | | | | : : : : : | | :
Db 63 ISDL 66

RESULT 14
US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: 1488.033000B
; CURRENT APPLICATION NUMBER: US/09/334,951
; EARLIER FILING DATE: 1999-06-17
; EARLIER APPLICATION NUMBER: US 08/208,339
; EARLIER FILING DATE: 1994-03-08
; EARLIER APPLICATION NUMBER: US 08/446,881
; EARLIER FILING DATE: 1995-05-05
; EARLIER APPLICATION NUMBER: US 08/465,682

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; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/722,719
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-334-951-6

Query Match      36.7%; Score 143; DB 4; Length 89;
Best Local Similarity 40.6%; Pred. No. 2.5e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;

QY 5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPVYKMI 64
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 24 GTNKE--LCCLVYTSWOIPQKFIVDYSETSPQCPKPGVLLTFRDKETICADPNKKWYQY 81
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

QY 65 LNKL 68
Db 82 ISDL 85

RESULT 15
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Seilhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO

; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; US-08-375-346A-6

Query Match      36.2%; Score 141; DB 1; Length 78;
Best Local Similarity 43.1%; Pred. No. 3.9e-11;
Matches 25; Conservative 12; Mismatches 19; Indels 2; Gaps 1;

QY 5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPVYK 62
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 22 GTNKE--LCCLVYTSWOIPQKFIVDYSETSPQCPKPGVLLTFRDKETICADPNKKWVQ 77
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Search completed: July 28, 2003, 04:05:36
Job time : 5.88235 secs
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.55882 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165a-30
Perfect score: 390
Sequence: 1 LGPYGANNEDSVCCRDYVRY.....EICADPRVPWVKMILNLSQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

- Database : Published_Applications_AA.*
- 1: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
 - 2: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
 - 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
 - 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
 - 5: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
 - 6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
 - 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
 - 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
 - 9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
 - 10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
 - 11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
 - 12: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
 - 13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
 - 14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
 - 15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep.*
 - 16: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
 - 17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance, to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	DB ID	Description
1	386	99.0	93	10	US-09-837-446-6
2	386	99.0	93	11	US-09-811-088-2
3	386	99.0	93	15	US-10-314-410-2
4	381	97.7	93	10	US-09-908-599-2
5	381	97.7	93	10	US-09-908-600-2
6	268	68.7	68	15	US-10-001-221A-3
7	214.5	55.0	67	15	US-10-001-221A-7
8	213	54.6	37	10	US-09-864-761-43730
9	153	39.2	71	10	US-09-144-838-3
10	152	39.0	78	15	US-10-001-221A-6
11	145	37.2	69	11	US-09-792-793A-28
12	145	37.2	89	10	US-09-334-923A-6
13	145	37.2	89	10	US-09-334-954A-6
14	145	37.2	97	10	US-09-925-302-792
15	144	36.9	73	10	US-09-144-838-6
16	143	36.7	70	10	US-09-334-923A-65
17	143	36.7	70	10	US-09-334-954A-65

17	143	36.7	70	10	US-09-334-954A-65	Sequence 65, Appl
18	141	36.2	78	15	US-10-158-366-6	Sequence 6, Appl
19	138	35.4	89	10	US-09-834-795A-34	Sequence 34, Appl
20	138	35.4	89	12	US-09-834-794A-34	Sequence 34, Appl
21	134	34.4	72	10	US-09-144-838-5	Sequence 5, Appl
22	131	33.6	67	10	US-09-144-838-41	Sequence 41, Appl
23	131	33.6	68	10	US-09-144-838-10	Sequence 10, Appl
24	131	33.6	68	10	US-09-144-838-42	Sequence 42, Appl
25	131	33.6	68	10	US-09-195-457-11	Sequence 11, Appl
26	131	33.6	68	11	US-09-792-793A-29	Sequence 29, Appl
27	131	33.6	91	8	US-08-927-939-21	Sequence 21, Appl
28	131	33.6	91	10	US-09-144-838-9	Sequence 9, Appl
29	131	33.6	91	10	US-09-834-795A-29	Sequence 29, Appl
30	131	33.6	91	12	US-09-834-794A-29	Sequence 29, Appl
31	131	33.6	91	12	US-09-920-137A-8	Sequence 8, Appl
32	131	33.6	91	12	US-09-537-858-1	Sequence 1, Appl
33	131	33.6	91	15	US-10-158-366-5	Sequence 5, Appl
34	131	33.6	91	15	US-10-057-275-8	Sequence 8, Appl
35	131	33.6	91	15	US-10-293-705-12	Sequence 12, Appl
36	129	33.1	66	15	US-10-141-620-19	Sequence 19, Appl
37	129	33.1	69	10	US-09-195-457-9	Sequence 9, Appl
38	129	33.1	70	11	US-09-792-793A-24	Sequence 24, Appl
39	129	33.1	91	15	US-10-153-064-3	Sequence 3, Appl
40	129	33.1	92	8	US-08-927-939-19	Sequence 19, Appl
41	129	33.1	92	10	US-09-151-450-3	Sequence 3, Appl
42	129	33.1	92	10	US-09-908-599-3	Sequence 3, Appl
43	129	33.1	92	10	US-09-334-923A-53	Sequence 53, Appl
44	129	33.1	92	10	US-09-834-795A-33	Sequence 33, Appl
45	129	33.1	92	10	US-09-334-954A-53	Sequence 53, Appl

ALIGNMENTS

RESULT 1
US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James B.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 99.0%; Score 386; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHYFWTSDSCPFGVLLTFRDKEICADPRVPW 61
|||||
Db 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHYFWTSDSCPFGVLLTFRDKEICADPRVPW 84
|||||
QY 62 KMILNLSQ 70
|||||
Db 85 KMILNLSQ 93
|||||
RESULT 2
US-09-811-088-2

; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match 99.0%; Score 386; DB 11; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLQ 70
Db 85 KMILNKLQ 93

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match 99.0%; Score 386; DB 15; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLQ 70
Db 85 KMILNKLQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PF177P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match 97.7%; Score 381; DB 10; Length 93;
Best Local Similarity 98.6%; Pred. No. 3.3e-39;
Matches 68; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLQ 70
Db 85 KMILNKLQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,

STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match 97.7%; Score 381; DB 10; Length 93;
Best Local Similarity 98.6%; Pred. No. 3.3e-39;
Matches 68; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANMEDSVCCRDYVRRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADRPVWV 61
DB 25 GPGANMEDSVCCRDYVRRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADRPVWV 84
QY 62 KMILNLSQ 70
DB 85 KMILNLSQ 93

RESULT 6
US-10-001-221A-3
; Sequence 3, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 68
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 68.7%; Score 268; DB 15; Length 68;
Best Local Similarity 64.7%; Pred. No. 1.5e-25;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;

QY 2 GPGANMEDSVCCRDYVRRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADRPVWV 61
DB 1 GPGANVEDSICQDYIRHPLSRVLFKFTSKCRKPGVLLTVKNRDICADPRQVWV 60

QY 62 KMILNLS 69
DB 61 KKLHKL 68

RESULT 7
US-10-001-221A-7
; Sequence 7, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; CURRENT FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match 55.0%; Score 214.5; DB 15; Length 67;
Best Local Similarity 58.5%; Pred. No. 5.2e-19;
Matches 38; Conservative 13; Mismatches 9; Indels 5; Gaps 1;

QY 10 DSV-----CCRDYVRRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADRPVWV 64
DB 3 DSVSIPITCCQDYIRHPLSRVLFKFTSKCRKPGVLLTVKNRDICADPRQVWV 62
QY 65 LNKL 69
DB 63 LHLK 67

RESULT 8
US-09-864-761-43730
; Sequence 43730, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Weisheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
; TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
; FILE REFERENCE: Acomlca-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
SEQ ID NO 43730
LENGTH: 37
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC004382.1
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: EST_HUMAN HIT: W61220.1, EVALUE 8.50e-01
OTHER INFORMATION: SWISSPROT HIT: Q00626, EVALUE 3.00e-18
US-09-864-761-43730

Query Match 54.68; Score 213; DB 10; Length 37;
Best Local Similarity 100.08; Pred. No. 4.2e-19;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 ANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGV 42
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DB 1 ANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGV 37

RESULT 9
US-09-144-838-3
Sequence 3, Application US/09144838A
Patent No. US20020051996A1
GENERAL INFORMATION:
APPLICANT: Sianl, Michael A.
APPLICANT: Wilken, Jill
APPLICANT: Simon, Reyna
TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
FILE REFERENCE: GREN-020/01US
CURRENT APPLICATION NUMBER: US/09/144,838A
CURRENT FILING DATE: 1998-08-31
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER FILING DATE: 1997-09-04
NUMBER OF SEQ ID NOS: 54
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 71
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 39.28; Score 153; DB 10; Length 71;
Best Local Similarity 42.98; Pred. No. 1.8e-11;
Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

QY 13 CCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWVKMILNKL 68
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 12 CCYGFQHPPPVQILKEWYPTSPACKPGVILLTKRGQICADPSKNNVROLMORL 67
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
RESULT 10
US-10-001-221A-6
Sequence 6, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J., Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 78
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 39.08; Score 152; DB 15; Length 78;
Best Local Similarity 40.88; Pred. No. 2.6e-11;
Matches 29; Conservative 16; Mismatches 24; Indels 2; Gaps 2;
QY 2 GPYGANMEDSVCCRDYVRYRLPL-RVYKHFYWTSDSCPRGVVL-LTFRDKEICADPRVP 59
||||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 1 GPYGANVEDSICFENVINRKIPQIRLESYRITNQPKKAVIKKQKRGKVCADPKR 60
||||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
QY 60 WVKMILNKL 70
||| : : :
DB 61 WVRDSMKHLQ 71

RESULT 11
US-09-792-793A-28
Sequence 28, Application US/09792793A
Patent No. US20020168370A1
GENERAL INFORMATION:
APPLICANT: McDonald, John R.
APPLICANT: Coggins, Philip
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
FILE REFERENCE: 25020-601D
CURRENT APPLICATION NUMBER: US/09/792,793A
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 93
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 28
LENGTH: 69
TYPE: PRT
ORGANISM: homo sapien
FEATURE:
OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 37.28; Score 145; DB 11; Length 69;
Best Local Similarity 40.68; Pred. No. 1.7e-10;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWVKMI 64
||||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 4.GTNKE--LCCLVLTWQIPQKFIQVYSETSPQCPKPGVILLTKRGQICADPNKKWQKY 61
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
QY 65 LNK 68

; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-6

Query Match 36.9%; Score 144; DB 10; Length 73;
Best Local Similarity 44.6%; Pred No. 2,3e-10;
Matches 25; Conservative 12; Mismatches 19; Indels 0; Gaps 0;

QY 13 CCRDYYRRLPLRVVYKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
|| | : || : : || || || : || || || : || || || : || : : ||
Db 14 CCLGYQKRPLQVLLSSWYPTSQLCPKPGVILLTKRGRQICADPSKNVVRQLMQRL 69

Search completed: July 28, 2003, 04:20:04
Job time : 9.53882 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 80.2941 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-30
Perfect score: 390
Sequence: 1 LGPYGANMEDSVCCRDYVRY.....EICADPRVPWKMLNKLQS 70

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Pending_Patents_AA_Main:*

- 1: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep.*
- 2: /cgn2_6/ptodata/1/paa/US06_COMB.pep.*
- 3: /cgn2_6/ptodata/1/paa/US07_COMB.pep.*
- 4: /cgn2_6/ptodata/1/paa/US08_COMB.pep.*
- 5: /cgn2_6/ptodata/1/paa/US081_COMB.pep.*
- 6: /cgn2_6/ptodata/1/paa/US082_COMB.pep.*
- 7: /cgn2_6/ptodata/1/paa/US083_COMB.pep.*
- 8: /cgn2_6/ptodata/1/paa/US084_COMB.pep.*
- 9: /cgn2_6/ptodata/1/paa/US085_COMB.pep.*
- 10: /cgn2_6/ptodata/1/paa/US086_COMB.pep.*
- 11: /cgn2_6/ptodata/1/paa/US087_COMB.pep.*
- 12: /cgn2_6/ptodata/1/paa/US088_COMB.pep.*
- 13: /cgn2_6/ptodata/1/paa/US089_COMB.pep.*
- 14: /cgn2_6/ptodata/1/paa/US090_COMB.pep.*
- 15: /cgn2_6/ptodata/1/paa/US091_COMB.pep.*
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- 24: /cgn2_6/ptodata/1/paa/US100_COMB.pep.*
- 25: /cgn2_6/ptodata/1/paa/US101_COMB.pep.*
- 26: /cgn2_6/ptodata/1/paa/US102_COMB.pep.*
- 27: /cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	13	US-08-939-107-30
2	390	100.0	70	14	US-09-067-447-30
3	390	100.0	70	14	US-09-067-447-30
4	390	100.0	70	14	US-09-067-447B-30
5	390	100.0	70	19	US-09-509-165A-30
6	388	99.5	172	20	US-09-646-028-49

7	388	99.5	334	20	US-09-646-028-53	Sequence 53, Appl
8	386	99.0	587	20	US-09-646-028-50	Sequence 50, Appl
9	386	99.0	69	27	US-60-412-866-1	Sequence 1, Appl
10	386	99.0	86	13	US-08-925-837-10	Sequence 10, Appl
11	386	99.0	93	1	PCT-US00-00953-6	Sequence 6, Appl
12	386	99.0	93	8	US-08-464-594-2	Sequence 2, Appl
13	386	99.0	93	8	US-08-479-620-2	Sequence 2, Appl
14	386	99.0	93	9	US-08-558-658-2	Sequence 2, Appl
15	386	99.0	93	11	US-08-760-127-3	Sequence 3, Appl
16	386	99.0	93	12	US-08-820-364-2	Sequence 2, Appl
17	386	99.0	93	13	US-08-925-857-12	Sequence 12, Appl
18	386	99.0	93	13	US-08-931-764-2	Sequence 2, Appl
19	386	99.0	93	13	US-08-931-764B-2	Sequence 2, Appl
20	386	99.0	93	13	US-08-939-107-2	Sequence 2, Appl
21	386	99.0	93	14	US-09-067-447-2	Sequence 2, Appl
22	386	99.0	93	14	US-09-067-447-2	Sequence 2, Appl
23	386	99.0	93	14	US-09-067-447B-2	Sequence 2, Appl
24	386	99.0	93	19	US-09-509-165A-2	Sequence 2, Appl
25	386	99.0	93	19	US-09-591-992-2	Sequence 2, Appl
26	386	99.0	93	21	US-09-712-726-2	Sequence 2, Appl
27	386	99.0	93	21	US-09-791-537-22726	Sequence 22726, A
28	386	99.0	93	22	US-09-811-088-2	Sequence 2, Appl
29	386	99.0	93	22	US-09-837-446-6	Sequence 6, Appl
30	386	99.0	100	21	US-09-760-476-2007	Sequence 2007, Ap
31	386	99.0	100	21	US-09-760-481-204	Sequence 204, App
32	386	99.0	100	26	US-10-216-245-2007	Sequence 2007, Ap
33	386	99.0	100	26	US-10-216-388-204	Sequence 204, App
34	386	99.0	100	26	US-10-217-651-449	Sequence 449, App
35	386	99.0	154	13	US-08-939-107-40	Sequence 40, Appl
36	386	99.0	154	14	US-09-067-447-40	Sequence 40, Appl
37	386	99.0	154	14	US-09-067-447B-40	Sequence 40, Appl
38	386	99.0	154	14	US-09-067-447B-40	Sequence 40, Appl
39	386	99.0	154	19	US-09-509-165A-40	Sequence 40, Appl
40	381	97.7	93	1	PCT-US00-30237-2	Sequence 2, Appl
41	381	97.7	93	13	US-08-986-188-2	Sequence 2, Appl
42	381	97.7	93	18	US-09-432-768-2	Sequence 2, Appl
43	381	97.7	93	18	US-09-484-221-2	Sequence 2, Appl
44	381	97.7	93	23	US-09-908-599-2	Sequence 2, Appl
45	381	97.7	93	23	US-09-908-600-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-08-939-107-30
; Sequence 30, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC:
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939,107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

```

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-939-107-30

Query Match 100.0%; Score 390; DB 13; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQ 70
Db 61 VKMILNKLQ 70

RESULT 2
US-09-067-447-30
; Sequence 30, Application US/09067447
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTI
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/560,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.

; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQ 70
Db 61 VKMILNKLQ 70

RESULT 3
US-09-067-447-30
; Sequence 30, Application US/09067447A
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
; TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
; FILE REFERENCE: 27866/34404
; CURRENT APPLICATION NUMBER: US/09/067,447A
; CURRENT FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: 08/939,107
; EARLIER FILING DATE: 1997-09-26
; EARLIER APPLICATION NUMBER: 08/660,542
; EARLIER FILING DATE: 1996-06-07
; EARLIER APPLICATION NUMBER: 08/558,658
; EARLIER FILING DATE: 1995-11-16
; EARLIER APPLICATION NUMBER: 08/479,620
; EARLIER FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQ 70
Db 61 VKMILNKLQ 70

RESULT 4
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US-09-067-447B-30
; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70

RESULT 5

US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match 100.0%; Score 390; DB 19; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70

RESULT 6

US-09-646-028-49
; Sequence 49, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note-synthetic construct
US-09-646-028-49

Query Match 99.5%; Score 388; DB 20; Length 172;
Best Local Similarity 98.6%; Pred. No. 9.7e-41;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70

RESULT 7
US-09-646-028-53
; Sequence 53, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-09-646-028-53

Query Match 99.5%; Score 388; DB 20; Length 334;
Best Local Similarity 98.6%; Pred. No. 2e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 60
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DB 1 MGPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 60
:|||||
QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70

RESULT 8
US-09-646-028-50
; Sequence 50, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 50
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-09-646-028-50

Query Match 99.5%; Score 388; DB 20; Length 587;
Best Local Similarity 98.6%; Pred. No. 3.7e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 60
:|||||
DB 1 MGPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 60
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QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70

RESULT 9
US-60-412-866-1
; Sequence 1, Application US/60412866
; GENERAL INFORMATION:
; APPLICANT: Demotz et al.
; TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES
; FILE REFERENCE: 29964/38772
; CURRENT APPLICATION NUMBER: US/60/412,866
; CURRENT FILING DATE: 2002-09-23
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-412-866-1

Query Match 99.0%; Score 386; DB 27; Length 69;
Best Local Similarity 100.0%; Pred. No. 6.4e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 61
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DB 1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFRDKKEICADPRVPW 60
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QY 62 KMILNKLQ 70
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DB 61 KMILNKLQ 69

RESULT 10
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnick, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925,857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-925-857-10

Query Match 99.0%; Score 386; DB 13; Length 86;
Best Local Similarity 100.0%; Pred. No. 8.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 61
Db 18 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 77

QY 62 KMILNKLQ 70

Db 78 KMILNKLQ 86

RESULT 11

PCT-US00-00953-6

; Sequence 6, Application PC/TUS00000953

; GENERAL INFORMATION:

; APPLICANT: Butcher, Eugene

; APPLICANT: Campbell, James

; APPLICANT: Rottman, James

; APPLICANT: Wu, Lijian

; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND

; TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING

; FILE REFERENCE: SUN-110PRV

; CURRENT APPLICATION NUMBER: PCT/US00/00953

; CURRENT FILING DATE: 2000-01-14

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 6

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

PCT-US00-00953-6

Query Match

Best Local Similarity 99.0%; Score 386; DB 13; Length 93;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 61
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 84

QY 62 KMILNKLQ 70

Db 85 KMILNKLQ 93

RESULT 12

US-08-464-594-2

; Sequence 2, Application US/08464594

; GENERAL INFORMATION:

; APPLICANT: LI, ET AL

; TITLE OF INVENTION: Human Chemokine Beta-13

; NUMBER OF SEQUENCES: 8

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,

; ADDRESSEE: CECCHI, STEWART & OLSTEIN

; STREET: 6 BECKER FARM ROAD

; CITY: ROSELAND

; STATE: NEW JERSEY

; COUNTRY: USA

; ZIP: 07068

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5 INCH DISKETTE

; COMPUTER: IBM PS/2

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: WORD PERFECT 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/464,594

; FILING DATE: June 5, 1995

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

Query Match 99.0%; Score 386; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.9e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: FERRARO, GREGORY D.

REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-443

TELECOMMUNICATION INFORMATION:

TELEPHONE: 201-994-1700

TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 AMINO ACIDS

TYPE: AMINO ACID

STRANDEDNESS:

TOPOLOGY: LINEAR

MOLECULE TYPE: PROTEIN

US-08-464-594-2

Query Match 99.0%; Score 386; DB 8; Length 93;

Best Local Similarity 100.0%; Pred. No. 8.9e-41;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 61
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 84

QY 62 KMILNKLQ 70

Db 85 KMILNKLQ 93

RESULT 13

US-08-479-620-2

; Sequence 2, Application US/08479620

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; APPLICANT: Gray, Patrick W.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE

; NUMBER OF SEQUENCES: 24

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

; STREET: 6300 Sears Tower, 233 South Wacker Drive

; CITY: Chicago

; STATE: Illinois

; COUNTRY: United States of America

; ZIP: 60606-6402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/479,620

; FILING DATE:

; CLASSIFICATION: 536

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/32628

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-479-620-2

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 24.7059 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-30
Perfect score: 390
Sequence: 1 LGPGANMEDSVCCRDYVRY.....EICADPRVFWVKMLNKLQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues
Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*
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2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
3: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep.*
4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4.*
5: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep.*
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10: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4.*
11: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep.*
12: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4.*
13: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep.*
14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	388	99.5	172	12	US-10-335-394-49
2	388	99.5	334	12	US-10-335-394-53
3	388	99.5	587	12	US-10-335-394-50
4	386	99.0	69	12	US-10-341-931-2
5	386	99.0	93	2	PCT-US02-35606-109
6	386	99.0	93	2	PCT-US02-35606-146
7	386	99.0	93	2	PCT-US02-40891-473
8	386	99.0	93	2	PCT-US02-40891-549
9	386	99.0	93	2	PCT-US02-40891-638
10	386	99.0	93	2	PCT-US02-40891-639
11	386	99.0	93	2	PCT-US02-40891-640
12	386	99.0	93	2	PCT-US02-40891-641
13	386	99.0	93	12	US-10-314-410-2
14	386	99.0	93	12	US-10-405-027-5105
15	386	99.0	93	12	US-10-445-790-2
16	386	99.0	93	14	US-60-453-135-8659
17	386	99.0	93	14	US-60-453-050-8659
18	386	99.0	93	14	US-60-455-444-4765
19	386	99.0	93	14	US-60-465-241-4765

20	386	99.0	93	14	US-60-466-412-8659	Sequence 8659, Ap
21	386	99.0	678	2	PCT-US02-40891-333	Sequence 333, Appl
22	381	97.7	93	12	US-10-285-572-2	Sequence 2, Appl1
23	381	97.7	93	12	US-10-137-438A-2	Sequence 2, Appl1
24	381	97.7	93	12	US-10-406-494-2	Sequence 2, Appl1
25	380	97.4	677	2	PCT-US02-40891-422	Sequence 422, App
26	380	97.4	678	2	PCT-US02-40891-257	Sequence 257, App
27	373	95.6	676	2	PCT-US02-40891-423	Sequence 423, App
28	373	95.6	677	2	PCT-US02-40891-424	Sequence 424, App
29	366	93.8	676	2	PCT-US02-40891-425	Sequence 425, App
30	268	68.7	68	10	US-09-839-445-3	Sequence 3, Appl1
31	268	68.7	68	12	US-10-001-221A-3	Sequence 3, Appl1
32	214.5	55.0	67	10	US-09-839-445-7	Sequence 7, Appl1
33	214.5	55.0	67	12	US-10-001-221A-7	Sequence 7, Appl1
34	162.5	41.7	77	10	US-09-839-445-6	Sequence 6, Appl1
35	152	39.0	78	12	US-10-001-221A-6	Sequence 6, Appl1
36	145	37.2	69	11	US-10-375-209A-28	Sequence 28, Appl
37	145	37.2	89	2	PCT-US02-40891-546	Sequence 546, App
38	145	37.2	89	2	PCT-US02-40891-561	Sequence 561, App
39	145	37.2	89	2	PCT-US02-40891-562	Sequence 562, App
40	145	37.2	89	2	PCT-US02-40891-564	Sequence 564, App
41	145	37.2	89	2	PCT-US02-40891-565	Sequence 565, App
42	145	37.2	89	2	PCT-US02-40891-566	Sequence 566, App
43	145	37.2	89	2	PCT-US02-40891-567	Sequence 567, App
44	145	37.2	89	12	US-10-165-233A-6	Sequence 6, Appl1
45	145	37.2	89	12	US-10-405-027-2964	Sequence 2964, Ap

ALIGNMENTS

RESULT 1
US-10-335-394-49
; Sequence 49, Application US/10335394
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; FILE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; CURRENT FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-49

Query Match	99.5%	Score 388;	DB 12;	Length 172;
Best Local Similarity	98.6%	Pred. No. 6.4e-41;		
Matches	69;	Conservative	1;	Mismatches 0;
				Indels 0; Gaps 0;
QY	1	LGPGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKICADPRVPW	60	
Db	1	MGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKICADPRVPW	60	
QY	61	VKMILNKLQ 70		
Db	61	VKMILNKLQ 70		

RESULT 2
US-10-335-394-53
; Sequence 53, Application US/10335394
; GENERAL INFORMATION:

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; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; CURRENT FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-53

Query Match          99.5%; Score 388; DB 12; Length 334;
Best Local Similarity 98.6%; Pred. No. 1.3e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
DB 1 MGPGYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70

RESULT 3
US-10-335-394-50
; Sequence 50, Application US/10335394
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; CURRENT FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 50
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-50

Query Match          99.5%; Score 388; DB 12; Length 587;
Best Local Similarity 98.6%; Pred. No. 2.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
DB 1 MGPGYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
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QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70
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RESULT 4

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US-10-341-931-2
; Sequence 2, Application US/10341931
; GENERAL INFORMATION:
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
; TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
; FILE REFERENCE: 00784 SRP
; CURRENT APPLICATION NUMBER: US/10/341,931
; CURRENT FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: 08/931,764
; PRIOR FILING DATE: 1997-09-16
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-931-2

Query Match          99.0%; Score 386; DB 12; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.3e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
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DB 1 GPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
QY 62 KMILNKLQ 70
:|||||
DB 61 KMILNKLQ 69

RESULT 5
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
:|||||
DB 25 GPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
:|||||
QY 62 KMILNKLQ 70
:|||||
DB 85 KMILNKLQ 93

RESULT 6
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
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; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
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Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
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Qy 62 KMILNKLSQ 70
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Db 85 KMILNKLSQ 93
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RESULT 10
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match          99.0%; Score 386; DB 2; Length 93;
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Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
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Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
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Qy 62 KMILNKLSQ 70
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Db 85 KMILNKLSQ 93
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RESULT 11
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
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Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
    |||||

Qy 62 KMILNKLSQ 70
    |||||
Db 85 KMILNKLSQ 93
    |||||

RESULT 12
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
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; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
Db      25 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 84
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Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 13
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
Db      25 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 84
      |||||||
Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 14
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match          99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
Db      25 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPWV 84
      |||||||
Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 15
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

Query Match      99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVWV 61
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVWV 84
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QY      62 KMILNKLQ 70
        ||||||||
Db      85 KMILNKLQ 93
        ||||||||

Search completed: July 28, 2003, 04:18:50
Job time : 24.7059 secs
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F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-91/Product: T-cell protein RANTES #status predicted <MAT>

Query Match 33.6%; Score 131; DB 1; Length 91;
Best Local Similarity 33.3%; Pred. No. 8.2e-09;
Matches 22; Conservative 17; Mismatches 25; Indels 1;

QY 3 PYGNMDSVCCRDVYRLPLRVVKKHFWTSQCPRGVLLTFRDKEICADPRVPWK 62
DB 25 PYSS--DTTPCCFAYIAPLPLRAHKEIFYISGKSNPAVVVTRKNQVCANPEKKWVR 82
QY 63 MILNKL 68
DB 83 EVINSL 88

RESULT 3
A32393
macrophage inflammatory protein-1-alpha precursor - mouse
N:Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-1a; SIS a
C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999
C:Accession: S11685; A32393; S04533; A53885; A30552; P80303; A27596; I56104
R:Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A:Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein-1.
A:Reference number: S11685; MUID:91016858; PMID:2216738
A:Accession: S11685
A:Molecule type: DNA
A:Residues: 1-92 <GRO>
A:Cross-references: EMBL:X53372; NID:g54062; PIDN:CAA37452.1; PID:g297531
A:Note: the authors' translation of the nucleotide sequence differs at several positions
R:Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A:Title: cDNA sequence of two inducible T-cell genes
A:Reference number: A32393; MUID:89184547; PMID:2784565
A:Accession: A32393
A:Molecule type: mRNA

A:Residues: 1-92 <KWO>
A:Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, C.; J. Exp. Med. 167, 1939-1944, 1988
A:Title: Cloning and characterization of a cDNA for murine macrophage inflammatory protein-1.
A:Reference number: S04533; MUID:88258380; PMID:3290382
A:Accession: S04533
A:Molecule type: mRNA
A:Residues: 1-48, 'E', 'I', '92 <DA2>
A:Cross-references: EMBL:X12531
A:Note: the authors translated the codon GAG for residue 49 as Asp and ATT for residue 9
A:Note: the sequence has been corrected in reference A53885
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, C.; J. Exp. Med. 170, 2189, 1989
A:Reference number: A53885
A:Contents: erratum
A:Accession: A53885
A:Molecule type: mRNA
A:Residues: 1-92 <DAV>
A:Cross-references: EMBL:X12531; NID:g53122; PIDN:CAA31047.1; PID:g53123
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A:Title: A family of small inducible proteins secreted by leukocytes are members of a new class of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: A30552
A:Molecule type: mRNA
A:Residues: 1-21, 'L', '23-61, 'A', '63-92 <BRO>
A:Cross-references: GB:M23447; NID:g533240; PIDN:AAA40146.1; PID:g533241
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatellis, G.; Wolpe, S.D.; Mas J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, and cloning of the cDNA for the 17 kDa component.
A:Reference number: JL0088; MUID:89067830; PMID:3058856
A:Accession: P80303
A:Molecule type: mRNA

A:Residues: 24-33, 'XX', '36-54 <SHE>
R:Wolpe, S.D.; Davatellis, G.; Sherry, B.; Hesse, D.G.; Nguyen, H.T.; Mol J. Exp. Med. 167, 570-581, 1988
A:Title: Macrophages secrete a novel heparin-binding protein with inflammatory and chemotactic activity.
A:Reference number: A27596; MUID:88154745; PMID:3279154
A:Accession: A27596
A:Molecule type: protein
A:Residues: 24-33, 'XX', '36-42 <MOL>
A:Note: 26-Met, 30-Pro, and 39-Thr were also found
R:Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J. Immunol. 146, 4031-4040, 1991
A:Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and comparison with human IL-1.
A:Reference number: I56104; MUID:91237116; PMID:2033269
A:Accession: I56104
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-92 <RES>
A:Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
C:Comment: This protein is a monokine.

C:Genetics:
A:Introns: 23/3; 26/1; 63/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: heparin binding
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein #status experimental <MAT>

Query Match 33.6%; Score 131; DB 2; Length 92;
Best Local Similarity 37.9%; Pred. No. 8.3e-09;
Matches 25; Conservative 16; Mismatches 23; Indels 2; Gaps 2;

QY 3 PYGNMDSVCCRDVYRLPLRVVKKHFWTSQCPRGVLLTFRDKEICADPRVPWK 62
DB 25 PYGAD-TPTACCFYSYR-KIPRQFIVDYFETSSLCSPQGVIFLTRNRQICADSKETWVQ 82
QY 63 MILNKL 68
DB 83 EVITDL 88

RESULT 4

A46539
monocyte chemoattractant cytokine RANTES precursor - mouse
N:Alternate names: Murantes
C:Species: Mus musculus (house mouse)
C:Date: 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C:Accession: I48875; A46539; I48654; I56970
R:Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A:Title: Cloning, genomic organization, and chromosomal localization of the Scya5 gene.
A:Reference number: I48875; MUID:94132613; PMID:7507961
A:Accession: I48875
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <DAN>
A:Cross-references: EMBL:U02298; NID:g460090; PIDN:AAA18302.1; PID:g460091
R:Schall, T.J.; Simpson, N.J.; Wak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural analysis of the gene.
A:Reference number: A46539; MUID:92289805; PMID:1376360
A:Accession: A46539
A:Molecule type: mRNA
A:Residues: 1-18, 'A', '20-91 <SCH>
A:Cross-references: GB:S37648; NID:g250207; PIDN:AAB22330.1; PID:g250208
A:Experimental source: macrophage cell line PU5-1.8
A:Note: sequence extracted from NCBI backbone (NCBI:106768, NCBI:106770)
R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.; Mol. Cell. Biol. 14, 2914-2925, 1994
A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region of the RANTES gene.
A:Reference number: I48654; MUID:94217689; PMID:7513046
A:Accession: I48654
A:Status: translation not shown; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <SHI>

A;Cross-references: EMBL:X70675; NID:g475205; PIDN:CAA50011.1; PID:g475206
 R;Neilson, E.G.; Krensky, A.
 A;Map position: 17q11-17q21
 A;Title: Isolation and characterization of cDNA from renal tubular epithelium encoding m
 C;Superfamily: macrophage inflammatory protein
 F;1-20/Domain: signal sequence #status predicted <SIG>
 A;Reference number: I56970; MUID:92277990; PMID:1375672
 A;Accession: I56970
 A;Status: translated from GB/EMBL/DDBJ
 A;Molecule type: mRNA
 A;Residues: 1-40, 'E', 42-91 <NET>
 A;Cross-references: GB:M77747; NID:g200649; PIDN:AAA0029.1; PID:g200650
 C;Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
 C;Genetics:
 A;Introns: 26/1; 63/2
 Query Match 33.1%; Score 129; DB 1; Length 91;
 Best Local Similarity 36.4%; Pred. No. 1.4e-08;
 Matches 24; Conservative 15; Mismatches 25; Indels 2; Gaps 1;
 C;Species: Homo sapiens (man)
 C;Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
 C;Accession: A30573; A30574; A30412; A24198; A30908
 R;Nakao, M.; Nomiya, H.; Shimada, K.
 Mol. Cell. Biol. 10, 3646-3658, 1990
 A;Title: Structures of human genes coding for cytokine LD78 and their expression.
 A;Reference number: A30573; MUID:90287155; PMID:1694014
 A;Accession: A30573
 A;Molecule type: DNA
 A;Residues: 1-92 <NAK>
 A;Cross-references: GB:D90144; NID:g219905; PIDN:BA414172.1; PID:g219906
 R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
 J. Immunol. 142, 1582-1590, 1989
 A;Title: Mitogenic activation of human T cells induces two closely related genes which s
 A;Reference number: A30574; MUID:89140347; PMID:2521882
 A;Accession: A30574
 A;Molecule type: mRNA
 A;Residues: 1-92 <ZIP>
 A;Cross-references: GB:M25315; NID:g602452; PIDN:AAA57255.1; PID:g602453
 R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
 DNA Cell Biol. 9, 589-602, 1990
 A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
 A;Reference number: A30412; MUID:91103879; PMID:2271120
 A;Accession: A30412
 A;Molecule type: mRNA
 A;Residues: 1-92 <BLU>
 A;Cross-references: GB:M23178; GB:M32337; NID:g182846; PIDN:AAA35858.1; PID:g182847
 R;Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
 J. Biochem. 99, 885-894, 1986
 A;Title: A cDNA clone used to study mRNA inducible in human tonsillar lymphocytes by a t
 A;Reference number: A24198; MUID:86223879; PMID:3086300
 A;Accession: A24198
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-92 <ORA>
 A;Cross-references: GB:X03754; NID:g34298; PIDN:CAA27388.1; PID:g758089
 C;Genetics:

A;Gene: GDB:SCYA3
 A;Cross-references: GDB:120368; OMIM:182283
 A;Map position: 17q11-17q21
 C;Superfamily: macrophage inflammatory protein
 F;1-20/Domain: signal sequence #status predicted <SIG>
 F;21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
 F;33-57,34-73/Disulfide bonds: #status predicted
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 Best Local Similarity 34.5%; Pred. No. 1.5e-08;
 Matches 20; Conservative 14; Mismatches 24; Indels 0; Gaps 0;
 C;Species: Homo sapiens (man)
 C;Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
 C;Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30552
 R;Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Peg
 Mol. Immunol. 27, 1091-1102, 1990
 A;Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
 A;Reference number: JH0319; MUID:91061800; PMID:2247088
 A;Accession: JH0319
 A;Status: translation not shown
 A;Molecule type: DNA
 A;Residues: 1-92 <BAI>
 A;Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
 A;Experimental source: natural killer cell, strain CD3-CD4+, F5, 51F55
 R;Napolitano, M.; Modi, W.S.; Cevalario, S.J.; Gnarr, J.R.; Seauanez, H.N.; Leonard, W.
 J. Biol. Chem. 266, 17531-17536, 1991
 A;Title: The gene encoding the Act-2 cytokine. Genomic structure. HTLV-I/tax responsi
 A;Reference number: A40978; MUID:91373378; PMID:1894635
 A;Accession: A40978
 A;Molecule type: DNA
 A;Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
 A;Cross-references: GB:M59201; NID:g178021
 A;Note: 15-Ala was also found
 R;Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
 Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
 A;Title: Identification, cloning, and characterization of an immune activation gene.
 A;Reference number: A31767; MUID:8901764; PMID:2462251
 A;Accession: A31767
 A;Molecule type: mRNA
 A;Residues: 1-92 <LIP>
 A;Cross-references: GB:J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
 R;Chang, H.C.; Reinherz, E.L.
 Eur. J. Immunol. 19, 1045-1051, 1989
 A;Title: Isolation and characterization of a cDNA encoding a putative cytokine which
 A;Reference number: A37411; MUID:89325421; PMID:2568930
 A;Accession: A37411
 A;Molecule type: mRNA
 A;Residues: 1-92 <CHA>
 A;Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
 R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
 J. Immunol. 142, 1582-1590, 1989
 A;Title: Mitogenic activation of human T cells induces two closely related genes whic
 A;Reference number: A30574; MUID:89140347; PMID:2521882
 A;Accession: B30574
 A;Molecule type: mRNA
 A;Residues: 1-19, 'L', 21-92 <ZIP>
 A;Cross-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
 R;Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
 J. Immunol. 143, 2907-2916, 1989
 A;Title: A novel polypeptide secreted by activated human T lymphocytes.
 A;Reference number: A45817; MUID:90038522; PMID:2809212
 A;Accession: B45817

C;Comment: This protein is a monokine.

C;Genetics:

A;Introns: 26/1; 64/2

C;Superfamily: macrophage inflammatory protein

C;Keywords: glycoprotein

F;1-23/Domain: signal sequence #status predicted <SIG>

F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>

F;76/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 31.4%; Score 122.5; DB 2; Length 92;

Best Local Similarity 39.4%; Pred. No. 9e-08;

Matches 26; Conservative 10; Mismatches 29; Indels 1; Gaps 1;

QY 3 PYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFDRKEICADPRVPWVK 62

Db 25 PMGSDPPTS--CCFSYTSRQLHRSFVMDYETSLCSKPAVVFLTKRGROICANPSEPVWT 83

QY 63 MILNKL 68

Db 84 EYMSDL 89

RESULT 8

B35673

LD78-beta protein precursor - human

N;Alternate names: macrophage inflammatory protein homolog COS19-2; small inducible

C;Species: Homo sapiens (man)

C;Date: 28-Sep-1990 #sequence.revision 28-Sep-1990 #text_change 20-Jun-2000

C;Accession: B35673; B30412; S10157; B30508

R;Nakao, M.; Nomiyama, H.; Shimada, K.

Mol. Cell. Biol. 10, 3646-3658, 1990

A;Title: Structures of human genes coding for cytokine LD78 and their expression.

A;Reference number: A35673; MUID:90287155; PMID:1694014

A;Accession: B35673

A;Status: preliminary

A;Molecule type: DNA

A;Residues: 1-93 <NA>

A;Cross-references: GB:D90145; NID:g219907; PIDN:BAA14173.1; PID:g219908

R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.

DNA Cell Biol. 9, 589-602, 1990

A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell

A;Reference number: A30412; MUID:91103879; PMID:2271120

A;Accession: B30412

A;Status: preliminary; not compared with conceptual translation

A;Molecule type: DNA

A;Residues: 1-93 <BL>

A;Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g18284

R;Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Se

Nucleic Acids Res. 18, 3261-3270, 1990

A;Title: Two inflammatory mediator cytokine genes are closely linked and variably

A;Reference number: S10157; MUID:90287702; PMID:1972563

A;Accession: S10157

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-93 <IR>

A;Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666

C;Comment: This protein is a member of a "small inducible" or "activation specific" g

C;Genetics:

A;Gene: GDB:SCYA4

A;Cross-references: GDB:I20369; OMIM:182284

A;Map position: 17q11-17q21

A;Introns: 26/1; 64/2

C;Superfamily: macrophage inflammatory protein

C;Keywords: cytokine

F;1-22/Domain: signal sequence #status predicted <SIG>

F;23-93/Product: LD78-beta protein #status predicted <MAT>

Query Match 31.3%; Score 122; DB 2; Length 93;

Best Local Similarity 32.8%; Pred. No. 1.1e-07;

Matches 19; Conservative 14; Mismatches 25; Indels 0; Gaps 0;

QY 11 SVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFDRKEICADPRVPWVKMILNKL 68

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OM protein. - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.67647 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-30
Perfect score: 390
Sequence: 1 LCPYGANMEDSVCCRDVRY.....EICADPRVPWVKMILNLSQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : | SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	386	99.0	93	1 SY22_HUMAN	O00626 homo sapien
2	268	68.7	92	1 SY22_MOUSE	O88430 mus musculus
3	145	37.2	89	1 SY18_HUMAN	P55774 h small ind
4	141	36.2	92	1 SY03_RAT	P50229 rattus norv
5	137.5	35.3	90	1 SY04_CHICK	O90826 gallus gall
6	131	33.6	91	1 SY05_HUMAN	P13501 homo sapien
7	131	33.6	92	1 SY03_MOUSE	P10855 mus musculus
8	129.5	33.2	104	1 SY12_MOUSE	O62401 mus musculus
9	129	33.1	91	1 SY05_MOUSE	P30882 mus musculus
10	129	33.1	92	1 SY03_HUMAN	P10147 homo sapien
11	129	33.1	92	1 SY05_RAT	P50231 rattus norv
12	128.5	32.9	92	1 SY04_RAT	P50230 rattus norv
13	126	32.3	93	1 SY14_HUMAN	Q16627 homo sapien
14	125	32.1	94	1 VM12_KSHV	O98157 kaposi's sa
15	125	32.1	113	1 SY15_HUMAN	Q16663 homo sapien
16	123.5	31.7	92	1 SY04_HUMAN	P13236 h small ind
17	123	31.5	91	1 SY05_CAVPO	P97272 cavia porce
18	122.5	31.4	92	1 SY04_MOUSE	P14097 mus musculus
19	122	31.3	93	1 SY3L_HUMAN	P16619 homo sapien
20	118.5	30.4	70	1 REG1_BOVIN	P82943 bos taurus
21	118	30.3	91	1 SY05_BOVIN	O97919 bos taurus
22	117	30.0	99	1 SY08_HUMAN	P80075 homo sapien
23	116	29.7	99	1 SY07_HUMAN	P80098 homo sapien
24	115	29.5	120	1 SY02_CAVPO	O08782 cavia porce
25	113	29.0	94	1 SY17_HUMAN	Q92583 homo sapien
26	112.5	28.8	98	1 SY19_HUMAN	O99731 homo sapien
27	109.5	28.1	98	1 SY13_HUMAN	O99616 homo sapien
28	109.5	28.1	108	1 SY19_MOUSE	O70460 mus musculus
29	109.5	28.1	119	1 SY24_MOUSE	O91kc0 mus musculus
30	109.5	28.1	148	1 SY02_RAT	P14844 rattus norv
31	107	27.4	99	1 SY08_PIG	P49873 sus scrofa
32	106	27.2	94	1 SY26_HUMAN	O9y258 homo sapien
33	105	26.9	99	1 SY02_HUMAN	P13500 homo sapien

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00636;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,			
RA	Leviton D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RN	TISSUE=Macrophage;			
RC	MEDLINE=97450118; PubMed=9312138;			
RX	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D.,			
RA	Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RP	SEQUENCE FROM N.A.			
RN	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,			
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,			
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,			
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RL	Genomics 60:295-308(1999).			
RN	[4]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=pancreas, and Spleen;			
RA	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION.			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,			
RA	Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

O9myn4 macaca fasc
P46632 oryctolagus
O89093 mus musculus
P10148 mus musculus
O00175 homo sapien
Q09141 bos taurus
P28291 bos taurus
P51671 homo sapien
P55773 homo sapien
P52203 canis famil
Q29288 sus scrofa
P27784 mus musculus

ALIGNMENTS

```
RT chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1768(1998).
CC -|- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
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CC -----
DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24305.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; Q98157; ICM9.
DR Genew; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR ProSITE; PS00472; CC_chemokines_cc; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
KW SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FB9CC083F787 CRC64;
Query Match 99.0%; Score 386; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.5e-41; Indels 0; Gaps 0;
Matches 69; Conservative 0; Mismatches 0;
QY 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGVVLLFRDKEICADPRVPWV 61
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGVVLLFRDKEICADPRVPWV 84
QY 62 KMLNKLQ 70
DB 85 KMLNKLQ 93
RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
```

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RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shmizu T., Seidl T., Andersson J., Melchers F., Rollink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -|- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR ProSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
KW Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;
Query Match 68.7%; Score 268; DB 1; Length 92;
Best Local Similarity 64.7%; Pred. No. 1.3e-26;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;
QY 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGVVLLFRDKEICADPRVPWV 61
DB 25 GPGANVEDSCCQDYIRHPLPSRLVKKEFFWTSKCRKPGVVLLITVKRDICADPRQWV 84
QY 62 KMLNKLK 69
DB 85 KLLHLKLS 92
RESULT 3
SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
```

RN SEQUENCE FROM N.A.
 RA Li H., Ruben S.;
 RL "Macrophage inflammatory protein-3 and -4";
 RT patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE-Aorta, and Lung;
 RX MEDLINE-97376836; PubMed-9233607;
 RA Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
 RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
 RA Miura R., Opendakker G., van Damme J., Yoshie O., Nomiya H.;
 RT "A novel human CC chemokine PARC that is most homologous to
 RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
 RT T lymphocytes, but not for monocytes.";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-98230488; PubMed-9570561;
 RA Kodella V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdts S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 RT structural homologue of macrophage inflammatory protein-1 alpha with
 RT a Th2-associated expression pattern.";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE-97275308; PubMed-9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 RT of novel chemokines using the worldwideweb and expressed sequence tag
 RT databases.";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RC TISSUE-Dendritic cell;
 RX MEDLINE-97336102; PubMed-9192897;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 RT naive T cells.";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-99168908; PubMed-10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiya H.;
 RT "Chemokine PARC gene (SCY1A18) generated by fusion of two
 RT MIP-1alpha/LD78alpha-like genes.";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE-99189237; PubMed-10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 RT human CC chemokine DC-CK-1/PARC/MIP-4/SCY1A18.";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Politz O., Kodella V., Guillot P., Orfanos C.E., Goerdts S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 RT within the first intron sequence.";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,

CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC
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 CC
 CC EMBL; AB000221; BAA21670.1; -
 CC EMBL; Y13710; CRA74039.1; -
 CC EMBL; AB012113; BAA34368.1; -
 CC EMBL; AF082214; AAC32287.1; -
 CC EMBL; AF082212; AAC32287.1; JOINED.
 CC EMBL; AF082213; AAC32287.1; JOINED.
 CC EMBL; AF111198; AAD30390.1; -
 CC HSP; P13236; IHUM.
 CC Genew; HGNC:10616; SCY1A18.
 CC MIN; 603757; -
 CC InterPro; IPR000827; CC-chemokine_sml.
 CC InterPro; IPR018111; Chemokine_IL8.
 CC Pfam; PF00048; IL8; 1.
 CC SMART; SM00199; SCY; 1.
 CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 CC Cytokine; Chemotaxis; Inflammatory response; Signal.
 CC SIGNAL 1 20
 CC CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 CC DISULFID 30 54 BY SIMILARITY.
 CC DISULFID 31 70 BY SIMILARITY.
 CC SEQUENCE 89 AA; 9849 MW; C287B94B9C0518E4 CRC64;
 SQ
 Query Match 37.2%; Score 145; DB 1; Length 89;
 Best Local Similarity 40.6%; Pred. No. 2.7e-11;
 Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
 Qy 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFDRKEICADPRVPWKMI 64
 Db 24 GTNKE--LCCLVYTSQIPQKFIQVYSETSPQCPKPGVILLTKRGQICADPNKKVQKY 81
 Qy 65 LNKL 68
 Db 82 ISDL 85
 RESULT 4
 SY03_RAT
 ID SY03_RAT STANDARD; PRT; 92 AA.
 AC P50229;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha).
 GN SCYA3 OR MIP1A.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID-10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN-CD-1; TISSUE=Lung;

RX MEDLINE-95298037; PubMed-7779098;
 RA Shi M.M., Godleski J.J., Paulauskis J.D.;
 RT "Molecular cloning and posttranscriptional regulation of macrophage
 RT inflammatory protein-1 alpha in alveolar macrophages.";
 RL Biochem. Biophys. Res. Commun. 211:289-295(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Long Evans; TISSUE=Lung;
 RA MEDLINE-95238980; PubMed-7722328;
 RA Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
 RT "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
 RT acute lung injury in rats.";
 RL J. Immunol. 154:4793-4802(1995).
 RN [3]
 RP SEQUENCE OF 24-57.
 RC STRAIN=Wistar;
 RX MEDLINE-96183056; PubMed-8607872;
 RA Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
 RT "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
 RT member of rat GRO/CINC, is a predominant chemokine produced by
 RT lipopolysaccharide-stimulated rat macrophages in culture.";
 RL Biochem. Biophys. Res. Commun. 220:945-948(1996).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
 CC BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
 CC PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
 CC MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
 CC PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
 CC ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFILX. THIS PROTEIN
 CC BINDS HEPARIN.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 DR EMBL; U22414; AAA80608.1; -;
 DR EMBL; U06435; AAA96498.1; -;
 DR HSSP; P13236; IHUM.
 DR InterPro: IPR000827; CC_chemkine_sml.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 6 6 A -> T (IN REF. 2).
 FT CONFLICT 57 57 C -> W (IN REF. 2 AND 3).
 SQ SEQUENCE 92 AA; 10335 MW; 14E861C647F9A2EB CRC64;
 Query Match 36.28; Score 141; DB 1; Length 92;
 Best Local Similarity 39.48; Pred. No. 8.7e-11;
 Matches 26; Conservative 17; Mismatches 21; Indels 2; Gaps 2;
 QY 3 PYGNMDSVCCRDYVRYRLPLRVKHFYWTSSCPRPVGVLLTFRDKKEICADPRVPWK 62
 DB 25 PYGAD-TPTACCSYGR-QIPKRFIADYFTTSSLCSPGVIFLTKRNRQICADPKETWQ 82
 QY 63 MILNKL 68
 DB 83 EYITEL 88

RESULT 5
 SY04_CHICK
 ID SY04_CHICK STANDARD; PRT; 90 AA.
 AC Q90826; Q910C9;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 15-JUN-2002 (Rel. 41, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
 DE protein 1-beta homolog).
 GN SCY4.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Bone marrow;
 RX MEDLINE-95369710; PubMed-7642115;
 RA Petrenko O., Ischenko I., Enrietto P.J.;
 RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
 RT mammalian macrophage inflammatory protein-1 beta.";
 RL Gene 160:305-306(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RA Hughes S.M., Bumstead N.;
 RT "Mapping of the gene encoding the chicken homologue of the mammalian
 RT chemokine SCY4.";
 RL Submitted (JUN-1995) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP SEQUENCE OF 14-90 FROM N.A.
 RA Petrenko O., Enrietto P.J.;
 RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
 CC (BY SIMILARITY).
 CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; L34553; AAA48747.1; -;
 DR EMBL; AJ243034; CAB45103.1; -;
 DR HSSP; P13236; IHUM.
 DR InterPro: IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine; Chemotaxis; Signal.
 FT SIGNAL 1 21 BY SIMILARITY.
 FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
 FT DISULFID 32 56 BY SIMILARITY.
 FT DISULFID 33 72 BY SIMILARITY.
 FT CONFLICT 87 87 M -> L (IN REF. 1).
 SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
 Query Match 35.38; Score 137.5; DB 1; Length 90;
 Best Local Similarity 37.98; Pred. No. 2.3e-10;
 Matches 25; Conservative 14; Mismatches 26; Indels 1; Gaps 1;
 QY 3 PYGNMDSVCCRDYVRYRLPLRVKHFYWTSSCPRPVGVLLTFRDKKEICADPRVPWK 62
 DB 23 PVGSDPPTS-CCFTYISRLQFPFVSADYVETNSQCPHAGVVFITKRGVCANPNDWQ 81
 QY 63 MILNKL 68

Db 82 DYNKMK 87

RESULT 6

SY05_HUMAN STANDARD; PRT; 91 AA.

AC P13501; O43646; Q9NYA2;

DT 01-JAN-1990 (Rel. 13, Created)

DT 15-JUN-1999 (Rel. 38, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A5 precursor (CCU5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228) (TCP228).

GN SCYA5.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

OX NCBI_TaxID=9606;

PN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=88285659; PubMed=2456327;

RA Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C., Davis M.M., Krensky A.M.;

RT "A human T cell-specific molecule is a member of a new gene family.";

RN J. Immunol. 141:1018-1025(1988).

RP SEQUENCE FROM N.A.

RA Jang J.S., Kim B.E.;

RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.

RN [3]

RP SEQUENCE FROM N.A.

RX MEDLINE=99228475; PubMed=10213461;

RA Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;

RT "Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LEC, and RANTES.";

RN J. Interferon Cytokine Res. 19:227-234(1999).

RP [4]

RP SEQUENCE FROM N.A.

RA Zeng Q.P., Yang R.Y., Fu L.C.;

RT "The complete sequence of human beta-chemokine RANTES mRNA.";

RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.

RN [5]

RP SEQUENCE FROM N.A.

RA TISSUP-Brain;

RA Strausberg R.;

RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.

RN [6]

RP SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION.

RX MEDLINE=96106406; PubMed=8525373;

RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C., Lusso P.;

RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells.";

RL Science 270:1811-1815(1995).

RN [7]

RP STRUCTURE BY NMR.

RX MEDLINE=95352612; PubMed=7542919;

RA Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;

RT "The three-dimensional solution structure of RANTES.";

RL Biochemistry 34:9307-9314(1995).

RN [8]

RP STRUCTURE BY NMR.

RX MEDLINE=95244456; PubMed=7537088;

RA Skelton N.J., Aspiras F., Ogez J., Schall T.J.;

RT "Proton NMR assignments and solution conformation of RANTES, a chemokine of the C-C type.";

RL Biochemistry 34:5329-5342(1995).

RN [9]

RP SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).

RX MEDLINE=99111238; PubMed=9889151;

RA Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H., Picard L., Wlodawer A., Lubkowski J., Kent S.B.;

RT "Total chemical synthesis and high-resolution crystal structure of the potent anti-HIV protein AOP-RANTES.";

Chem. Biol. 6:43-51(1999).

RN [10]

RP X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).

RA Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C., Lubkowski J.;

RT "The crystal structure of Met-RANTES: comparison with native RANTES and AOP-RANTES.";

RL Protein Pept. Lett. 7:73-82(2000).

CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT RANTES PROTEIN INDUCES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.

CC -1- INDUCTION: BY MITOGENS.

CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

CC -----

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CC -----

DR EMBL; M21121; AAA36725.1; -

DR EMBL; AF043341; AAC03541.1; -

DR EMBL; AF088219; AAC63331.1; -

DR EMBL; AF266753; AAF73070.1; -

DR EMBL; BC008600; AAH08600.1; -

DR PIR; A28815; A28815.

DR PDB; 1HRJ; 14-OCT-96.

DR PDB; 1RTN; 03-JUN-95.

DR PDB; 1RTO; 03-JUN-95.

DR PDB; 1B3A; 23-APR-99.

DR PDB; 1EQT; 19-APR-00.

DR Genew; HGNC:10632; SCYA5.

DR MIM; 187011; -

DR InterPro; IPR000827; CC_chemkine_sm.

DR InterPro; IPR001811; Chemokine_IL8.

DR Pfam; PF00048; IL8; 1.

DR SMART; SM00199; SCY; 1.

DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

DR Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;

KW 3D-structure.

KW SIGNAL 1 23 SMALL INDUCIBLE CYTOKINE A5.

FT CHAIN 24 91

FT DISULFID 33 57

FT DISULFID 34 73

FT CONFLICT 7 7 A -> R (IN REF. 1 AND 4).

FT CONFLICT 14 14 A -> V (IN REF. 4).

FT SEQUENCE 91 AA; 9990 MW; FB0BFAF9A87C620F CRC64;

Query Match 33.6%; Score 131; DB 1; Length 91;

Best Local Similarity 33.3%; Pred. No. 1.5e-09;

Matches 22; Conservative 17; Mismatches 25; Indels 2; Gaps 1;

Oy 3 PYGAMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRGVVLLTFRKEICADPRVPWK 62

Db 25 PYSS--DTTPCCFAYIARPLPRAHIKEYFTYSGKSNPAAVVFVTRKQRVCANPEKKWR 82

Oy 63 MILNKL 68

Db 83 EYINSL 88

RESULT 7

OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97079149; PubMed=8920881;
 RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C.,
 RA Werthel B.K., Gutierrez-Ramos J.C.;
 RT "Distinct expression and function of the novel mouse chemokine
 RT monocyte chemoattractant protein-5 in lung allergic inflammation.";
 RL J. Exp. Med. 184:1939-1951(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97149438; PubMed=8996246;
 RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;
 RA "Murine monocyte chemoattractant protein (MCP)-5: a novel CC
 RT chemokine that is a structural and functional homologue of human
 RT MCP-1.";
 RL J. Exp. Med. 185:99-109(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX STRAIN=B10.S/J, BALB/c, DBA/2J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
 RX MEDLINE=99370037; PubMed=10438970;
 RA Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
 RA Blankenhorn E.P.;
 RT "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scyal2
 RT (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are
 RT candidates for eae7, a locus controlling susceptibility to monophasic
 RT remitting/nonrelapsing experimental allergic encephalomyelitis.";
 RL J. Immunol. 163:2262-2266(1999).
 CC -|- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
 CC AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
 CC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
 CC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
 CC PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
 CC -|- SUBUNIT: HOMODIMER (BY SIMILARITY).
 CC -|- TISSUE SPECIFICITY: SECRETED.
 CC -|- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
 CC THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
 CC BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
 CC -|- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
 CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
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 CC -----
 DR EMBL; U50712; AAB50053.1; -;
 DR EMBL; U66670; AAB49424.1; -;
 DR EMBL; AF065934; AAF15384.1; -;
 DR EMBL; AF065935; AAF15385.1; -;
 DR EMBL; AF065936; AAF15386.1; -;
 DR EMBL; AF065937; AAF15387.1; -;
 DR EMBL; AF065938; AAF15388.1; -;
 DR HSSP; P13500; IDOL.
 DR MGD; MGI:108224; Scyal2.
 DR InterPro; IPR000827; CC_Chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine; Chemotaxis; Signal; Inflammatory response.
 FT SIGNAL 1 22 BY SIMILARITY.
 FT CHAIN 23 104 SMALL INDUCIBLE CYTOKINE A12.
 FT DISULFID 33 58 BY SIMILARITY.
 FT DISULFID 34 74 BY SIMILARITY.
 FT VARIANT 94 104 OFFILEPSCIG -> RT (IN STRAIN SJL/J).
 SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FF4CC3DBF CRC64;

Query Match 33.2%; Score 129.5; DB 1; Length 104;
 Best Local Similarity 42.4%; Pred. No. 2.7e-09;
 Matches 25; Conservative 11; Mismatches 22; Indels 1; Gaps 1;
 QY 13 CCRDVYRPLRVVVKHF-YWTSDSCPRGVVLLTFRDKEICADPRVPVWVKMLNLSQ 70
 DB 33 CCYNYVQKIHVRKLSYRRITSSQCPRVAFVFTILDKEICADPRKWKVNSINHLDK 91
 RESULT 9
 SY05_MOUSE STANDARD; PRT; 91 AA.
 AC P30882;
 DT 01-JUL-1993 (Rel. 26, Created)
 DT 01-JUN-1994 (Rel. 29, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
 DE protein) (SIS-delta) (Mukantes).
 GN SCYA5.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92277990; PubMed=1375672;
 RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
 RA Kresky A.M., Neilson E.G.;
 RT "Isolation and characterization of cDNA from renal tubular epithelium
 RT encoding murine Rantes.";
 RL Kidney Int. 41:220-225(1992).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92289805; PubMed=1376260;
 RA Schall T.J., Simpson N.J., Mak J.Y.;
 RT "Molecular cloning and expression of the murine RANTES cytokine;
 RT structural and functional conservation between mouse and man.";
 RL Eur. J. Immunol. 22:1477-1481(1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=94132613; PubMed=7507961;
 RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
 RT "Cloning, genomic organization, and chromosomal localization of the
 RT Scya5 gene encoding the murine chemokine RANTES.";
 RL J. Immunol. 152:1182-1189(1994).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX STRAIN=BALB/c;
 RX MEDLINE=94217689; PubMed=7513046;
 RA Shin H.-S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
 RA Paznekas W.A.;
 RT "Definition of a lipopolysaccharide-responsive element in the 5'-
 RT flanking regions of Murantes and crg-2.";
 RL Mol. Cell. Biol. 14:2914-2925(1994).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX STRAIN=BALB/CJ,B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
 RA Ma R.Z., Teuscher C.;
 RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
 CC -|- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
 CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
 CC BASOPHILS AND ACTIVATES EOSINOPHILS.
 CC -|- SUBCELLULAR LOCATION: Secreted.
 CC -|- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
 CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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FT SIGNAL 1 23
FT CHAIN 24 92
FT DISULFID 33 57
FT DISULFID 34 73
FT MUTAGEN 49 49
FT SEQUENCE 92 AA; 10085 MW; 517865D5D6776CA8 CRC64;

Query Match 33.1%; Score 129; DB 1; Length 92;
Best Local Similarity 34.5%; Pred. No. 2.7e-09;
Matches 20; Conservative 14; Mismatches 24; Indels 0; Gaps 0;

QY 11 SVCCRDYVRYRLPLRVKHYFTWSDSCPRPGVLLTFRDKKEICADPRVPWVKMILNKL 68
: || | : : : || | : || | : || | : || | : || | : || | : || | : || |
Db 31 TACCFSVTSRQIPQNEFIADYFETSSQCSKPGVIFLTKRSQVCADPSEWVQYVSDL 88

RESULT 11
SY05_RAT STANDARD; PRT; 92 AA.
AC P50231;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta).
GN SCYA5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RC STRAIN-Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL; U06436; AAA96499.1;
CC HSSP; P13236; LHUM.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 24
FT CHAIN 25 92
FT DISULFID 34 58
FT DISULFID 35 74
FT SEQUENCE 92 AA; 10170 MW; BAFBEC2B4208ABC6 CRC64;

Query Match 33.1%; Score 129; DB 1; Length 92;
Best Local Similarity 36.4%; Pred. No. 2.7e-09;
Matches 24; Conservative 15; Mismatches 25; Indels 2; Gaps 1;

QY 3 PYGANNEDSVCCRDYVRYRLPLRVKHYFTWSDSCPRPGVLLTFRDKKEICADPRVPWVK 62
||||: : || | : || | : || | : || | : || | : || | : || | : || | : || |
Db 26 PYGS--DTTPCCFAYLSLALPRAHVKEYFTTSKCSNLAVFVTRNRQVCANPEKKVQO 83

RESULT 12
SY04_RAT STANDARD; PRT; 92 AA.
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
protein 1-beta) (MIP-1-beta).
GN SCYA4 OR MIP1B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RC STRAIN-Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC -!- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL; U06434; AAA96497.1;
CC HSSP; P13236; LHUM.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 92
FT DISULFID 34 58
FT DISULFID 35 74
FT SEQUENCE 92 AA; 10234 MW; 60B451EEBEC7103D CRC64;

Query Match 32.9%; Score 128.5; DB 1; Length 92;
Best Local Similarity 39.4%; Pred. No. 3.2e-09;
Matches 26; Conservative 10; Mismatches 29; Indels 1; Gaps 1;

QY 3 PYGANNEDSVCCRDYVRYRLPLRVKHYFTWSDSCPRPGVLLTFRDKKEICADPRVPWVK 62
||||: : || | : || | : || | : || | : || | : || | : || | : || | : || |
Db 25 PYGSDPPTS-CCFSYTSRKIHNFVMDYVETSSLCSPQAVVFLTKRQICADPSEFWN 83

RESULT 13
SY14_HUMAN STANDARD; PRT; 93 AA.
AC Q16627; Q13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
```

DE (HCC-1/HCC-3) (NCC-2).
GN SCVA14 OR NCC2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
RC TISSUE=Bone marrow;
RX MEDLINE=96136773; PubMed=8551235;
RA Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
RA Kubies M., Tomczkowski J., Kirchhoff K., Raida M., Ademann K.,
RA Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
RA Baggiolini M., Forssmann W.-G.;
RT "HCC-1, a novel chemokine from human plasma.";
RL J. Exp. Med. 183:295-299(1996).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RX MEDLINE=98263352; PubMed=9600961;
RA Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
RT "HCC-2, a human chemokine: gene structure, expression pattern, and
RT biological activity.";
RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LBC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
CC -!- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
CC RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
CC INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
CC AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
CC LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
CC PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
CC ARE PRODUCED BY ALTERNATIVE SPLICING.
CC -!- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
CC TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
CC MARROW. PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
CC -!- SIMILARITY: BELONGS TO THE INTERCINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; Z49270; CAA89264.1; -
DR EMBL; Z70292; CAA94307.1; -
DR EMBL; Z70293; CAA94309.1; -
DR EMBL; Z49269; CAA89263.1; -
DR EMBL; AF088219; AAC63329.1; -
DR EMBL; AF088219; AAF23982.1; -
DR HSSP; P13236; 1HUM.
DR MIW; 601392; -
DR Genew; HGNC:10612; SCVA14.
DR InterPro; IPR000827; CC_chemkine.sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCV; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Signal; Alternative splicing.
FT SIGNAL 1 19 SMALL INDUCIBLE CYTOKINE A14.
FT CHAIN 20 93

FT DISULFID 35 59 BY SIMILARITY.
FT DISULFID 36 75 BY SIMILARITY.
FT VARSPLIC 27 27 R -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-3).
SQ SEQUENCE 93 AA: 10678 MW; DDBB899DC9148836 CRC64;
Query Match 32.3%; Score 126; DB 1; Length 93;
Best Local Similarity 30.4%; Pred. No. 6.5e-09;
Matches 21; Conservative 15; Mismatches 29; Indels 4; Gaps 1;
Qy 2 GPYCANMEDSVCCRDYVRYRLPLAVKHFYWTSDSCPRPGVVLTERDKETICADPRVPW 61
Db 28 GPY----HPSECCFTYTYKIPRIMDYETNSQCSKPGIVFITKRGHSVCTNPDSKWK 83
Qy 62 KMILNKLQ 70
Db 84 QDYIKMKE 92
RESULT 14
VMI2_KSHV
ID VMI2_KSHV STANDARD; PRT; 94 AA.
AC Q98157;
DT 16-OCT-2001 (Rel. 40, Created)
DE 16-OCT-2001 (Rel. 40, Last sequence update)
DE 16-OCT-2001 (Rel. 40, Last annotation update)
DE Viral macrophage inflammatory protein-II precursor (VMIP-II) (VMIP-1B).
DN ORF K4.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Ciuffo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RT "Kaposi's sarcoma-associated human herpesvirus-8 encodes homologs
RT of macrophage inflammatory protein-1 and interleukin-6.";
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [4]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).
RX MEDLINE=20496762; PubMed=11041848;
RA Fernandez E.J., Wilken J., Thompson D.A., Peiper S.C., Lolis E.;
RT "Comparison of the structure of VMIP-II with eotaxin-1, RANTES, and
RT MCP-3 suggests a unique mechanism for CCR3 activation.";
RL Biochemistry 39:12837-12844(2000).
RN [6]
RP STRUCTURE BY NMR.
RX MEDLINE=20060979; PubMed=10595530;
RA Liwang A.C., Wang Z.-X., Sun Y., Peiper S.C., Liwang P.J.;
RT "The solution structure of the anti-HIV chemokine VMIP-II.";
RL Protein Sci. 8:2270-2280(1999).
CC -!- FUNCTION: BLOCKS INFECTION BY SEVERAL DIFFERENT HUMAN

DR Genew; HGNC:10613; SCYA15.
 DR MIT; 601393;
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Heparin-binding; Signal; Polymorphism.
 FT SIGNAL 1
 FT CHAIN 22 113 SMALL INDUCIBLE CYTOKINE A15.
 FT DISULFID 53 77
 FT DISULFID 54 93
 FT DISULFID 64 104
 FT VARIANT 24 24
 FT CONFLICT 14 14 I -> T.
 FT SEQUENCE 113 AA; 12248 MW; 0BA0FCE7B8A30A04 CRC64;
 SQ

Query Match 32.1%; Score 125; DB 1; Length 113;
 Best Local Similarity 35.7%; Pred. No. 1.1e-08;
 Matches 20; Conservative 14; Mismatches 22; Indels 0; Gaps 0;

QY 13 CCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVVKMILNKL 68
 || | : : : : : || : ||| : : : : : || : : ||
 Db 53 CCTSYISQIPCSLMKSYFETSECKPGVIFLTKKGQVCAKPSGPGVQDCMKKL 108

Search completed: July 28, 2003, 04:01:12
 Job time : 3.67647 secs


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Db 74 KKLHKL 81
RESULT 2
Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 69.5%; Score 271; DB 11; Length 92;
Best Local Similarity 66.2%; Pred. No. 7.2e-28;
Matches 45; Conservative 14; Mismatches 9; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVKKFYWTSDSCPRGVVLLTFRDKEICADPRVPMV 61
DB 25 GPYGANVEDSICCDYIRHPLRPFRVKEFYWTSCRKPGVVLITIKNRDICAADPRMLWV 84
QY 62 KMLNKL 69
DB 85 KKLHKL 92

RESULT 3
Q9QZU2 PRELIMINARY; PRT; 92 AA.
AC Q9QZU2;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163476; RAD55763.1; -.
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352B63 CRC64;

Query Match 68.7%; Score 268; DB 11; Length 92;
Best Local Similarity 64.7%; Pred. No. 1.8e-27;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVKKFYWTSDSCPRGVVLLTFRDKEICADPRVPMV 61
DB 25 GPYGANVEDSICCDYIRHPLRPFRVKEFYWTSCRKPGVVLITIKNRDICAADPRVPMV 84
QY 62 KMLNKL 69
DB 85 KKLHKL 92

RESULT 4
Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; O12569;
DT 01-FEB-1997 (TREMBlrel. 02, Created)
DT 01-JUL-1997 (TREMBlrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RC MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [3]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvoletto V.R., Burns W.H., Sandford G., Wan X., Ciuffo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=97296220; PubMed=9151804;
RA Neipel F., Albrecht J.C., Fleckenstein B.;
RT "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
RT human herpesvirus 8: determinants of its pathogenicity?";
RL J. Virol. 71:4187-4192(1997).
RN [7]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A.
RA Ren S., Lin S.-F., Miller G.;
RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U75698; AAC57095.1; -.
DR EMBL; U74585; AAB61704.1; -.
DR EMBL; U93872; AAB62671.1; -.

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DR EMBL; U71366; AAC34943.1; -.
DR EMBL; U50138; AAD11536.1; -.
DR HSP; Q98157; IYMP.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Hypothetical protein.
SQ SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;

Query Match 39.2%; Score 153; DB 12; Length 95;
Best Local Similarity 42.9%; Pred. No. 2.2e-12;
Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

Qy 13 CCRDYVYRPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPWVKMLNKL 68
  || : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 36 CCGYFQHPVPVQILKEWYPTSPACKPGVILLTKRGQICADPSKNNVRLQML 91

RESULT 5
Q8QG57
ID Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP MEDLINE=21655115; PubMed=11757102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
  chicken CC chemokines.";
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match 36.7%; Score 143; DB 13; Length 91;
Best Local Similarity 39.4%; Pred. No. 4.2e-11;
Matches 26; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVYRPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPWVK 62
  |::| : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 25 PFGA--DTTVCFCFNSVRKLPQNHVKDYFTSSKCPQAAVVFITRKGQVCANPDARWVK 82

Qy 63 MILNKL 68
  :|
Db 83 EYINFL 88

Query Match 36.7%; Score 142; DB 13; Length 89;
Best Local Similarity 30.9%; Pred. No. 5.6e-11;
Matches 21; Conservative 21; Mismatches 24; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVYRPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPWVK 62
  |::| : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 23 PVGPDV--PTCCCTTYTHKIPRNLIQRIHYSTSCSKPAIIFITKKEREVCANPSDPWQ 80

Qy 63 MILNKL 70
  :|
Db 81 RYLSQV 88

RESULT 6
Q91ZL0
ID Q91ZL0 PRELIMINARY; PRT; 92 AA.
AC Q91ZL0;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
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DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match 36.5%; Score 142.5; DB 11; Length 92;
Best Local Similarity 43.9%; Pred. No. 5e-11;
Matches 29; Conservative 8; Mismatches 28; Indels 1; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVYRPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPWVK 62
  |::| : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 25 PRGSDPPIS--CCFSYASRKLPRNFVTDYETSSLCSPKPAVVFITRKGKEYCADPSQPWN 83

Qy 63 MILNKL 68
  :|
Db 84 EYVNDL 89

RESULT 7
Q918E0
ID Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20170941; PubMed=10704244;
RA Sick C., Schneider K., Staeheli P., Weinig K.C.;
RT "Novel chicken CXCL and CC chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSP; P13236; IHUM.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Signal.
FT SIGNAL 1 21 POTENTIAL.
FT CHAIN 22 89 CHEMOKINE K203.
FT CHAIN 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match 36.4%; Score 142; DB 13; Length 89;
Best Local Similarity 30.9%; Pred. No. 5.6e-11;
Matches 21; Conservative 21; Mismatches 24; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVYRPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPWVK 62
  |::| : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 23 PVGPDV--PTCCCTTYTHKIPRNLIQRIHYSTSCSKPAIIFITKKEREVCANPSDPWQ 80

Qy 63 MILNKL 70
  :|
Db 81 RYLSQV 88

RESULT 8
Q91Z65
ID Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIP1 ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
```



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OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pietneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF421391; AAL16932.1;
DR InterPro; IPR000827; CC_chemkine_sm1.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 91 AA; 10082 MW; D0D6EAEABE4242FF CRC64;

Query Match          30.6%; Score 119.5; DB 11; Length 91;
Best Local Similarity 36.5%; Pred. No. 5.1e-08;
Matches 23; Conservative 15; Mismatches 24; Indels 1; Gaps 1;

QY 7 NMEDSV--CCRDYYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPWVKML 65
   :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db 26 NGSDTIPCCFAYLSAVLPRAHVKEYFYTSKCSNFAVFVTRNRQVCANPKKKWQVEYI 85

QY 66 NKL 68
   ||
Db 86 NYL 88

RESULT 15
Q14745 PRELIMINARY; PRT; 80 AA.
AC Q14745;
DT 01-NOV-1996 (TEMBLrel. 01, Created)
DT 01-NOV-1996 (TEMBLrel. 01, Last sequence update)
DT 01-MAR-2002 (TEMBLrel. 20, Last annotation update)
DE LD78 alpha beta precursor (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Ishizuka K., Igata-Yi R., Naruse K., Nakashima H., Ohuchi K.,
RA Katsuragi S., Kin Y., Ohmoto Y., Nomiyama H., Iio M., Miura R.,
RA Miyakawa T.;
RL Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
DR EMBL; D63785; BAA09855.1; -.
DR HSPG; P13236; IHUM.
DR InterPro; IPR000827; CC_chemkine_sm1.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT SIGNAL              1      1
FT NON_TER            <1     16    POTENTIAL.
FT CHAIN               17    >80    LD78 ALPHA BETA.
FT NON_TER             80     80
FT SEQUENCE           80 AA; 8857 MW; 8B509EB15648E971 CRC64;

Query Match          30.0%; Score 117; DB 4; Length 80;
Best Local Similarity 34.6%; Pred. No. 9.6e-08;
Matches 18; Conservative 12; Mismatches 22; Indels 0; Gaps 0;

QY 11 SVCCRDYYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPWK 62
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Db 25 TACCFSYTSRQIQNFMDYFETSSQCCKPSVIFLTRGRGVQCADPSEWVQ 76

Search completed: July 28, 2003, 04:02:52
Job time : 12.9412 secs
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Search completed: July 28, 2003, 04:02:52
Job time : 12.9412 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-31

Perfect score: 382

Sequence: 1 GPYCANMEDSVCCRDYVRYR.....EICADPRVPYKMLNKLQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	382	100.0	69	AAW20061	Human macrophage d
2	382	100.0	69	AAW24415	Macrophage derived
3	382	100.0	69	AAW05874	Human macrophage-d
4	374	97.9	69	AAO20022	Human chemokine MD
5	374	97.9	69	AAO14155	Human MDC protein.
6	374	97.9	70	AAW20060	Human macrophage d
7	374	97.9	70	AAW24413	Macrophage derived
8	374	97.9	70	AAW05873	Human macrophage-d
9	374	97.9	86	AAW59432	Human chemokine pr
10	374	97.9	93	AAW20058	Macrophage derived

11	374	97.9	93	AAW62783	Amino acid sequenc
12	374	97.9	93	AAW59433	Human chemokine pr
13	374	97.9	93	AAW40811	Macrophage-derived
14	374	97.9	93	AAW26175	Macrophage-derived
15	374	97.9	93	AAW24414	Human macrophage d
16	374	97.9	93	AAW05871	Human macrophage-d
17	374	97.9	93	AAW06829	Macrophage derived
18	374	97.9	93	AAW07500	A human monokine d
19	374	97.9	93	AAO14046	Human macrophage-d
20	374	97.9	154	AAW05878	Yeast pre-pro-alpha
21	374	97.9	172	AAW29895	Human MDC and huma
22	374	97.9	334	AAW29904	Human MDC and huma
23	374	97.9	587	AAW29900	Human MDC and HIV-
24	369	96.6	93	AAW07604	Cytokine beta-13 s
25	369	96.6	93	AAW57881	Human chemokine be
26	369	96.6	93	AAW68352	Amino acid sequenc
27	368	96.3	68	AAW17688	Stem cell mobilisi
28	365	95.5	93	AAW05879	Human macrophage-d
29	364	95.3	93	AAW05880	Macaque macrophage
30	350	91.6	69	AAW20062	Human macrophage d
31	350	91.6	69	AAW24416	Macrophage derived
32	350	91.6	69	AAW05875	Human macrophage-d
33	343	89.8	93	AAW20059	Human macrophage d
34	343	89.8	93	AAW24417	Macrophage derived
35	343	89.8	93	AAW05872	Human macrophage-d
36	256	67.0	473	AAW61797	Chimeric chemokine
37	256	67.0	68	AAW61808	Murine MDC mature
38	256	67.0	68	AAW78392	Mouse chemokine mM
39	256	67.0	68	AAW68355	Murine chemokine m
40	256	67.0	92	AAW59434	Mouse chemokine pr
41	256	67.0	92	AAW05876	Mouse macrophage-d
42	253	66.2	81	AAW05877	Rat macrophage-der
43	213	55.8	37	ABW39053	Peptide #6559 enco
44	213	55.8	37	AAW59705	Human brain expres
45	213	55.8	37	AAW72285	Human bone marrow

ALIGNMENTS

RESULT 1

AAW20061
ID AAW20061 standard; Protein: 69 AA.

XX AC AAW20061;

XX DT 11-SEP-1997 (first entry)

XX Human macrophage derived chemokine analogue.

DE DE MDC; macrophage derived chemokine; C-C: Cys-Cys; Crohn's disease;
KW KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW KW wound healing; angiogenesis; inflammation.

XX OS Synthetic.

XX PN WO9640923-A1.

XX PD 19-DEC-1996.

XX PF 07-JUN-1996; 96WO-US10114.

XX PR 16-NOV-1995; 95US-0558658.

XX PR 07-JUN-1995; 95US-0479620.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX XX WPI; 1997-052324/05.

XX DR Macrophage derived chemokine (MDC) and analogues - used in the
XX PT treatment of inflammatory diseases, MDC antibodies used to treat

PT Crohn's disease, rheumatoid arthritis, etc.

PS Claim 25; Page 84; 106pp; English.

XX A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.

XX Sequence 69 AA;

Query Match 100.0%; Score 382; DB 18; Length 69;
 Best Local Similarity 100.0%; Pred. NO. 9.7e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVYL 60

DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVYL 60

QY 61 KMILNKLSQ 69

DB 61 KMILNKLSQ 69

RESULT 2

AA24415

ID AAY24415 standard; peptide; 69 AA.

XX AC AAY24415;

XX DT 24-SEP-1999 (first entry)

XX DE Macrophage derived chemokine analogue MDC-yl.

XX KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN US5932703-A.

XX PD 03-AUG-1999.

XX PF 07-JUN-1996; 96US-0660542.

XX PR 07-JUN-1996; 96US-0660542.

XX PR 07-JUN-1995; 95US-0479620.

XX PR 16-NOV-1995; 95US-0558658.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX WPI; 1999-443621/37.

XX DR Macrophage derived chemokine analogues useful for inhibiting

PT Macrophage derived chemokine-induced chemotaxis

XX PS Example 11; Column 59; 43pp; English.

XX The present sequence represents a macrophage derived chemokine (MDC)

CC analogue. MDC analogues are capable of inhibiting MDC induced

CC chemotaxis. Therefore, the MDC analogues may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.

XX Sequence 69 AA;

Query Match 100.0%; Score 382; DB 20; Length 69;

Best Local Similarity 100.0%; Pred. NO. 9.7e-42;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVYL 60

DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVYL 60

QY 61 KMILNKLSQ 69

DB 61 KMILNKLSQ 69

RESULT 3

AA05874

ID AAY05874 standard; Protein; 69 AA.

XX AC AAY05874;

XX DT 02-AUG-1999 (first entry)

XX DE Human macrophage-derived C-C chemokine MDC analogue MDC-yl.

XX KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO9915666-A2.

XX Key Location/Qualifiers

FT Misc-difference 59..60

FT /note= "Trp-Val in native MDC"

XX PD 01-APR-1999.

XX PF 28-SEP-1998; 98WO-US20270.

XX PR 28-APR-1998; 98US-0067447.

XX PR 26-SEP-1997; 97US-0939107.

XX PA (ICOS-) ICOS CORP.

XX PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX WPI; 1999-254715/21.

XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists

PS Example 11; Page 134; 147pp; English.

XX The present sequence represents synthetic analogue MDC-yl of the
 CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).

CC MDC-yl consists of amino acid residues 1-69 of the MDC mature

CC polypeptide, with residues 59-60 (Trp-Val) replaced with the

CC sequence Tyr-Leu. The analogue is expected to be an antagonist of

CC MDC activity, inhibiting activity by competitively binding to the

CC receptor that recognises MDC or by forming inactive heterodimers

CC with MDC. MDC antagonists are used in claimed methods for the

CC preparation of medicaments for the suppression of the proliferation

CC of a mammalian immunodeficiency virus, for inhibiting platelet

CC aggregation in a mammal, for the treatment or palliation of lupus
 CC erythematosis in a mammal, for inhibiting MDC-induced activation,
 CC chemotaxis or proliferation of cells that express CCR4, for
 CC inhibiting or palliating an allergic reaction in a mammal, and for
 CC treating asthma.

XX SQ Sequence 69 AA;

Query Match 100.0%; Score 382; DB 20; Length 69;
 Best Local Similarity 100.0%; Pred. No. 9.7e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPYL 60
 |||||
 Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPYL 60

QY 61 KMILNLSQ 69
 |||||

Db 61 KMILNLSQ 69

RESULT 4

AAO20022
 ID AAO20022 standard; protein; 69 AA.

XX AC AAO20022;

XX 11-JUN-2002. (first entry)

XX Human chemokine MDC protein.

XX Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
 KW antiarteriosclerotic; dermatological; antiinflammatory; antiallergic;
 KW immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
 KW AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
 KW atheroma; atherosclerosis; organ transplant rejection; MDC.

XX Homo sapiens.

XX WO200204015-A1.

XX 17-JAN-2002.

XX 12-JUL-2001; 2001WO-US21933.

XX 12-JUL-2000; 2000US-217683P.

XX (GRYP-) GRYPHON SCI.

XX Kochoendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;

XX WPI; 2002-268857/31.

XX New polymer-modified bioactive synthetic chemokines useful in the
 PT treatment of various diseases or disorders e.g. asthma

XX Disclosure; Fig 10C; 176pp; English.

XX The invention relates to polymer-modified bioactive synthetic chemokines
 CC and to methods for their production and use. The compounds and methods of
 CC the backbone of the invention are useful in the analysis and treatment of
 CC various diseases states e.g. HIV and AIDS related disorders, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
 CC transplant rejection, and rheumatoid arthritis. This sequence represents
 CC the human chemokine MDC protein of the invention.

XX SQ Sequence 69 AA;

Query Match 97.9%; Score 374; DB 23; Length 69;

Best Local Similarity 97.1%; Pred. No. 1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPYL 60

Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPVW 60
 |||||
 QY 61 KMILNLSQ 69
 |||||
 Db 61 KMILNLSQ 69

RESULT 5

AAO14155
 ID AAO14155 standard; protein; 69 AA.

XX AC AAO14155;

XX 25-APR-2002 (first entry)

XX Human MDC protein.

XX Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
 KW asthma; allergic rhinitis; atopic dermatitis; atheroma; antiinflammatory;
 KW antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
 KW antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
 KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.

XX Homo sapiens.

XX WO200204499-A1.

XX 17-JAN-2002.

XX 12-JUL-2001; 2001WO-US21934.

XX 12-JUL-2000; 2000US-217683P.

XX (GRYP-) GRYPHON SCI.

XX Offord R, Gaertner H, Hartley O;

XX WPI; 2002-171703/22.

XX Chemokine receptor modulator useful for treating e.g. asthma, allergic
 PT rhinitis comprises a chemically modified carboxyl-terminus and/or amino
 PT terminus analogs

XX Example 3; Fig 2; 86pp; English.

XX The present invention relates to chemokine receptor modulators, which
 CC comprise a chemokine polypeptide chain modified at N-terminus with an
 CC aliphatic chain and at least one amino acid derivatives and/or modified
 CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
 CC can be used to treat diseases such as HIV infection, AIDS, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
 CC transplant rejection and rheumatoid arthritis. The present sequence is
 CC the human MDC protein.

XX SQ Sequence 69 AA;

Query Match 97.9%; Score 374; DB 23; Length 69;

Best Local Similarity 97.1%; Pred. No. 1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPYL 60
 |||||

Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTLTFRDKEICADPRVPVW 60

QY 61 KMILNLSQ 69
 |||||

Db 61 KMILNLSQ 69

RESULT 6

AAW20060

ID AAW20060 standard; protein; 70 AA.

XX AC AAW20060;
 XX 11-SEP-1997 (first entry)
 XX Human macrophage derived chemokine analogue.
 DE KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
 KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
 KW wound healing; angiogenesis; inflammation.
 OS Synthetic.
 XX WO9640923-A1.
 PN 19-DEC-1996.
 PD 07-JUN-1996; 96WO-US10114.
 PF 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 XX (ICOS-) ICOS CORP.
 PA Godiska R, Gray PW;
 PI WPI; 1997-052324/05.
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX Claim 25; Page 83; 106pp; English.
 XX A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX SQ Sequence 70 AA;
 Query Match 97.9%; Score 374; DB 18; Length 70;
 Best Local Similarity 97.1%; Pred. No. 1.1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVHFYWTSDCPRGVYVLLTFRDKEICADPRVPYL 60
 DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVHFYWTSDCPRGVYVLLTFRDKEICADPRVPW 61
 QY 61 KMILNKLQ 69
 DB 62 KMILNKLQ 70
 RESULT 7
 AAY24413
 ID AAY24413 standard; peptide; 70 AA.
 XX AAY24413;
 AC AAY24413;
 XX 24-SEP-1999 (first entry)
 DE Macrophage derived chemokine analogue MDC (n+1).
 XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;

KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 OS Homo sapiens.
 OS Synthetic.
 PN US5932703-A.
 PD 03-AUG-1999.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX (ICOS-) ICOS CORP.
 PA Godiska R, Gray PW;
 PI WPI; 1999-443621/37.
 DR Macrophage derived chemokine analogues useful for inhibiting
 XX macrophage derived chemokine-induced chemotaxis
 PS Claim 1; Column 59; 43pp; English.
 CC The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. The MDC analogue is capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogue may be used to modulate
 CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX SQ Sequence 70 AA;
 Query Match 97.9%; Score 374; DB 20; Length 70;
 Best Local Similarity 97.1%; Pred. No. 1.1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVHFYWTSDCPRGVYVLLTFRDKEICADPRVPYL 60
 DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVHFYWTSDCPRGVYVLLTFRDKEICADPRVPW 61
 QY 61 KMILNKLQ 69
 DB 62 KMILNKLQ 70
 RESULT 8
 AAY05873
 ID AAY05873 standard; Protein; 70 AA.
 XX AAY05873;
 AC AAY05873;
 XX 02-AUG-1999 (first entry)
 DE Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
 XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.
 OS Homo sapiens.
 OS Synthetic.
 XX WO9915666-A2.
 PN 01-APR-1999.
 PD

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XX PF 28-SEP-1998; 98WO-US20270.
XX PR 28-APR-1998; 98US-0067447.
XX PR 26-SEP-1997; 97US-0939107.
XX PA (ICOS-) ICOS CORP.
XX PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
XX DR WPI; 1999-254715/21.
XX PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists
XX PS Example 11; Page 134; 147pp; English.
XX CC The present sequence represents synthetic analogue MDC(n+1) of the
XX CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
XX CC MDC(n+1) consists of a Leu residue following by amino acid residues
XX CC 1-69 of the MDC mature polypeptide. The analogue is expected to be
XX CC an antagonist of MDC activity, inhibiting activity by competitively
XX CC binding to the receptor that recognises MDC or by forming inactive
XX CC heterodimers with MDC. MDC antagonists are used in claimed methods
XX CC for the preparation of medicaments for the suppression of the
XX CC proliferation of a mammalian immunodeficiency virus, for inhibiting
XX CC platelet aggregation in a mammal, for the treatment or palliation
XX CC of lupus erythematosus in a mammal, for inhibiting MDC-induced
XX CC activation, chemotaxis or proliferation of cells that express CCR4,
XX CC for inhibiting or palliating an allergic reaction in a mammal, and
XX CC for treating asthma.
XX SQ Sequence 70 AA;
Query Match 97.9%; Score 374; DB 20; Length 70;
Best Local Similarity 97.1%; Pred. No. 1.1e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 61
QY 61 KMILNKLQ 69
DB 62 KMILNKLQ 70
RESULT 9
AAW59432
AC AAW59432;
AC AAW59432;
DT 27-AUG-1998 (first entry)
DE Human chemokine protein 331D5 from CD1a+ cDNA library.
XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
XX KW degenerative condition; abnormal proliferation; regeneration;
XX KW degeneration; atrophy.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Peptide 1..15
XX FT /label= signal
XX FT /note= "partial signal sequence"
XX FT Protein 16..86
XX FT /label= chemokine protein 331D5
XX PN W09811226-A2.
XX PR 19-MAR-1998.
XX PD

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PF 09-SEP-1997; 97WO-US15315.
PR 10-SEP-1996; 96US-0025724.
XX (SCHE ) SCHERING CORP.
XX Gorman DM, Hedrick JA, Zlotnik A;
XX WPI; 1998-207387/18.
XX DR N-PSDB; AAV34996.
XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
XX PT cancer and degenerative conditions
XX PS Disclosure; Page 75; 82pp; English.
XX CC This sequence represents a novel human chemokine protein, 331D5 which has
XX CC been isolated from a 90 per cent CD1a+ cDNA library and obtained by
XX CC random sequencing. Nucleic acid sequences encoding the chemokines can be
XX CC used for detection, in e.g. forensic techniques. Antibodies and other
XX CC binding agents may be used in diagnostics. The chemokines themselves are
XX CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
XX CC proliferation, regeneration, degeneration or atrophy may be treated by
XX CC the inventive compositions.
XX SQ Sequence 86 AA;
Query Match 97.9%; Score 374; DB 19; Length 86;
Best Local Similarity 97.1%; Pred. No. 1.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 18 GPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 77
QY 61 KMILNKLQ 69
DB 78 KMILNKLQ 86
RESULT 10
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX AC AAW20058;
XX AC AAW20058;
DT 11-SEP-1997 (first entry)
XX Macrophage derived chemokine for treating inflammation.
XX DE MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
XX KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
XX KW wound healing; angiogenesis; inflammation.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Peptide 1..24
XX FT /label= sig_peptide
XX FT Protein 25..93
XX FT /label= mat_protein
XX PN W09640923-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US10114.
XX PR 16-NOV-1995; 95US-0558658.
XX PR 07-JUN-1995; 95US-0479620.
XX (ICOS-) ICOS CORP.
XX PD

```

PI Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 97.9%; Score 374; DB 18; Length 93;
 Best Local Similarity 97.1%; Pred. No. 1.5e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVKHFYVWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVKHFYVWTSDCPRPGVLLTFRDKKEICADPRVPW 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX
 AC AAW62783;
 XX
 DT 24-SEP-1998 (first entry)
 XX
 DE Amino acid sequence of human STCP-1.
 XX
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX
 OS Homo sapiens.
 XX
 PN WO9824907-A1.
 XX
 PD 11-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US21552.
 XX
 PR 03-DEC-1996; 96US-0760127.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Andrew DP, Chang M;
 XX
 DR WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX
 PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells

XX Claim 1; Fig 2A-F; 96pp; English.
 XX
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 97.9%; Score 374; DB 19; Length 93;
 Best Local Similarity 97.1%; Pred. No. 1.5e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVKHFYVWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVKHFYVWTSDCPRPGVLLTFRDKKEICADPRVPW 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 XX
 AC AAW59433;
 XX
 DT 27-AUG-1998 (first entry)
 XX
 DE Human chemokine protein 331D5.
 XX
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= 331D5
 FT /note= "chemokine protein"
 XX
 PN WO9811226-A2.
 XX
 PD 19-MAR-1998.
 XX
 PF 09-SEP-1997; 97WO-US15315.
 XX
 PR 10-SEP-1996; 96US-0025724.
 XX
 PA (SCHE) SCHERING CORP.
 XX
 PI Gorman DM, Hedrick JA, Zlotnik A;
 XX
 DR WPI; 1998-207387/18.
 DR N-PSDB; AAV34997.
 XX
 PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX Claim 1; Page 78; 82pp; English.

PS This sequence represents a novel human chemokine protein, 33ID5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,

CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment

CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,

CC regeneration, degeneration or atrophy may be treated by the inventive

CC compositions.

XX Sequence 93 AA;

SQ Query Match 97.9%; Score 374; DB 19; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.5e-40;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKREICADPRVPYL 60

DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKREICADPRVPW 84

QY 61 KMILNKLQ 69

DB 85 KMILNKLQ 93

RESULT 13

AAW40811

ID AAW40811 standard; Protein; 93 AA.

XX AAW40811;

XX 01-APR-1998 (first entry)

XX Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;

KW arthritis; inflammatory disorder; cancer; Crohn's disease;

KW atherosclerosis.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "leader peptide"

FT Protein 25..93

FT /note= "mature protein"

XX US5688927-A.

XX 18-NOV-1997.

XX 07-JUN-1995; 95US-0480449.

XX 07-JUN-1995; 95US-0480449.

XX (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI; 1998-008038/01.

XX N-PSDB; AAT99233.

XX Antibodies specific for macrophage-derived chemokine - useful for

PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This

CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its

CC receptors. The DNA encoding this sequence can be used for identifying and

CC isolating non-human MDC homologues. The MDC protein is potentially useful

CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can

CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX Sequence 93 AA;

SQ Query Match 97.9%; Score 374; DB 19; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.5e-40;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKREICADPRVPYL 60

DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKREICADPRVPW 84

QY 61 KMILNKLQ 69

DB 85 KMILNKLQ 93

RESULT 14

AAV26175

ID AAV26175 standard; Protein; 93 AA.

XX AAV26175;

XX 29-SEP-1999 (first entry)

XX Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;

KW humoral response; cell-mediated response; PCR; immunostimulatory;

KW expression plasmid vector.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "signal peptide"

FT Protein 25..93

FT /note= "mature macrophage-derived chemokine"

XX W09929728-A1.

XX 17-JUN-1999.

XX 11-DEC-1998; 98WO-US26291.

XX 11-DEC-1997; 97US-0069281.

XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.

XX Devico AL, Gallo RC, Garzino-Demo A;

XX WPI; 1999-385578/32.

XX N-PSDB; AAX80630.

XX Methods of enhancing vaccine efficacy

XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.

XX The present sequence is macrophage-derived chemokine. This belongs to

CC the CC class of chemokines. The efficacy of a vaccine is enhanced by

CC combining it with one or more chemokines to enhance the immune response

CC to an antigen. This can be humoral or cell-mediated immune response. The

CC purified chemokines, fragments, derivatives or analogues are

CC administered either concurrently with one or more purified antigens

CC against which an immune response is desired or within a time period

CC either before or after antigen administration. The chemokine gene is

CC isolated by PCR, and administered by constructing an expression plasmid

CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

SQ Sequence 93 AA; Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Query Match 97.9%; Score 374; DB 20; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.5e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFDRDKEICADPRVPYL 60
|||||
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLTFDRDKEICADPRVPWV 84
|||||

QY 61 KMIILNKLSQ 69
|||||
Db 85 KMIILNKLSQ 93
|||||

Search completed: July 28, 2003, 04:04:46
Job time : 15.0756 secs

RESULT 15
AAY24414
ID AAY24414 standard; Protein; 93 AA.
XX AC AAY24414;
XX 24-SEP-1999 (first entry)
XX Human macrophage derived chemokine.
XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
KW inflammation; immune response; inflammatory disorder; Crohn's disease;
KW atherosclerosis; arthritis; pulmonary fibrosis.
XX Homo sapiens.
XX Key Location/Qualifiers
FH Peptide 1..24
FT /label= signal
FT Protein 25..93
FT /label= MDC
XX US5932703-A.
XX 03-AUG-1999.
XX 07-JUN-1996; 96US-0660542.
XX 07-JUN-1996; 96US-0660542.
PR 07-JUN-1995; 95US-0479620.
PR 16-NOV-1995; 95US-0558658.
XX (ICOS-) ICOS CORP.
XX Godlska R, Gray PW;
XX WPI; 1999-443621/37.
DR N-PSDB; AAX90162.
XX Macrophage derived chemokine analogues useful for inhibiting
PT macrophage derived chemokine-induced chemotaxis
XX Claim 2; Column 41-43; 43pp; English.
XX The present invention describes macrophage derived chemokine (MDC)
CC analogues which are capable of inhibiting MDC induced chemotaxis.
CC Therefore, the MDC analogues may be used to modulate inflammatory and
CC immune responses allowing for the treatment of disorders associated
CC with excessive inflammation or overactive immune responses. Inflammatory
CC disorders which may be treated in this way include Crohn's disease
CC (manifested by chronic inflammation of the bowel), atherosclerosis,
CC arthritis and pulmonary fibrosis. The present sequence represents human
CC MDC.
XX Sequence 93 AA;
Query Match 97.9%; Score 374; DB 20; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.5e-40;

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

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Title: US-09-509-165A-31
Perfect score: 382
Sequence: 1 GPGANMEDSVCCRDYVRYR.....EICADPRVFLKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues
Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2.6/ptodata/1/iaa/5A_COMB.pep.*
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4: /cgn2.6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2.6/ptodata/1/iaa/PTUS_COMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	382	100.0	69	2	US-08-660-542-31
2	374	97.9	70	2	US-08-660-542-30
3	374	97.9	93	1	US-08-480-449-2
4	374	97.9	93	4	US-08-660-542-2
5	374	97.9	93	4	US-09-232-878-6
6	374	97.9	93	4	US-08-479-603-2
7	374	97.9	93	5	PCR-US95-07294-2
8	350	91.6	69	2	US-08-660-542-32
9	343	89.8	93	2	US-08-660-542-25
10	141	36.9	95	4	US-09-230-637-26
11	133	34.8	89	1	US-08-208-339A-4
12	133	34.8	89	3	US-08-722-719-6
13	131	34.3	70	4	US-09-334-951-65
14	131	34.3	89	4	US-09-334-951-6
15	129	33.8	78	1	US-08-375-346A-6
16	129	33.8	78	2	US-08-467-123B-6
17	127.5	33.4	94	4	US-09-230-371A-21
18	125	32.7	68	4	US-09-141-833-5
19	123	32.2	68	2	US-08-936-387-17
20	121	31.7	68	2	US-08-936-387-18
21	121	31.7	113	4	US-09-180-077-6
22	121	31.7	113	4	US-09-180-077-11
23	119	31.2	67	4	US-09-141-833-2
24	119	31.2	68	2	US-08-936-387-1
25	119	31.2	68	2	US-08-615-232A-11
26	119	31.2	68	3	US-08-470-323-11
27	119	31.2	68	4	US-08-836-922-1

28	119	31.2	68	4	US-09-141-833-1	Sequence 1, Appl
29	119	31.2	69	3	US-07-982-759F-18	Sequence 18, Appl
30	119	31.2	69	4	US-08-836-922-2	Sequence 2, Appl
31	119	31.2	69	4	US-08-836-922-3	Sequence 3, Appl
32	119	31.2	69	4	US-08-836-922-4	Sequence 4, Appl
33	119	31.2	70	2	US-08-716-188-7	Sequence 7, Appl
34	119	31.2	73	2	US-08-936-387-13	Sequence 13, Appl
35	119	31.2	74	2	US-08-450-905B-18	Sequence 18, Appl
36	119	31.2	76	4	US-08-836-922-20	Sequence 20, Appl
37	119	31.2	90	4	US-09-230-637-40	Sequence 40, Appl
38	119	31.2	91	1	US-08-347-492B-12	Sequence 12, Appl
39	119	31.2	91	1	US-08-375-346A-5	Sequence 5, Appl
40	119	31.2	91	1	US-08-480-449-21	Sequence 21, Appl
41	119	31.2	91	2	US-08-633-682-3	Sequence 3, Appl
42	119	31.2	91	2	US-08-421-144A-8	Sequence 8, Appl
43	119	31.2	91	2	US-08-660-542-21	Sequence 21, Appl
44	119	31.2	91	2	US-08-798-143-12	Sequence 12, Appl
45	119	31.2	91	2	US-08-467-123B-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELETYPE: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31

Query Match 100.0% Score 382; DB 2; Length 69;

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Best Local Similarity 100.0%; Pred. No. 5.4e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 GPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPYL 60

QY 61 KMLNKLQS 69
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Db 61 KMLNKLQS 69

RESULT 2
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-30

Query Match 97.9%; Score 374; DB 2; Length 70;
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Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

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Db 2 GPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPW 61

QY 61 KMLNKLQS 69
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Db 62 KMLNKLQS 70

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-660-542-2

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
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QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 5
US-09-232-878-6
Sequence 6, Application US/09232878
Patent No. 6245332
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: H. sapiens
US-09-232-878-6

Query Match 97.9%; Score 374; DB 4; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
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DB 25 GPGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69

DB 85 KMILNKLSQ 93
RESULT 6
US-08-479-603-2
Sequence 2, Application US/08479603
Patent No. 6320023
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32780
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-603-2

Query Match 97.9%; Score 374; DB 4; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
DB 25 GPGANNEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 7
PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-356
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 97.9%; Score 374; DB 5; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGCVLLTFRDKEICADPRVPYL 60
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGCVLLTFRDKEICADPRVPW 84
QY 61 KMLNKLQS 69
DB 85 KMLNKLQS 93

RESULT 8
US-08-660-542-32
Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-0448
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-32
Query Match 91.6%; Score 350; DB 2; Length 69;
Best Local Similarity 91.3%; Pred. No. 8.5e-39;
Matches 63; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGCVLLTFRDKEICADPRVPYL 60
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHYFTSDSCPRGCVLLTFRDKEICADPRVPW 60
QY 61 KMLNKLQS 69
DB 61 KMLNKLQS 69
RESULT 9
US-08-660-542-25
Sequence 25, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-0448
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Protein
LOCATION: 1..69

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION: /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."

US-08-660-542-25

Query Match 89.8%; Score 343; DB 2; Length 93;
Best Local Similarity 91.3%; Pred. No. 1e-37;
Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVYKHYFTWSDSCPRGVLLTFRDKEICADPRVPYL 60

DB 25 GPGANMEDSVCCRDYVRYRLPLRVVYKHYFTWSDSCPRGVLLTFRDKEICADPRVPXX 84

QY 61 KMLNKLQSQ 69

DB 85 KMLNKLQSQ 93

RESULT 10

US-09-230-637-26
; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary

APPLICANT: Nicholas, John
APPLICANT: Hardwick, J. Marie
APPLICANT: Reitz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
FILE REFERENCE: 1107.78372
CURRENT APPLICATION NUMBER: US/09/230,637
PRIOR FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: 60/022,591
PRIOR FILING DATE: 1996-07-25
PRIOR APPLICATION NUMBER: PCT US 97/12931
PRIOR FILING DATE: 1997-07-24
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 26
LENGTH: 95
TYPE: PRT

ORGANISM: Kaposi's sarcoma-associated herpes-like virus

US-09-230-637-26

Query Match 36.9%; Score 141; DB 4; Length 95;

Best Local Similarity 39.3%; Pred. No. 3e-11;

Matches 22; Conservative 19; Mismatches 15; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVYKHYFTWSDSCPRGVLLTFRDKEICADPRVPYLLKMLNKL 67

DB 36 CCYGFQHQPPVPVQILKEWYPTSPACPKPGVILLTKRGQICADPSKNWVRLQML 91

RESULT 11

US-08-208-339A-4

; Sequence 4, Application US/08208339A

; Patent No. 5504003

; GENERAL INFORMATION:

; APPLICANT: LI, ET AL.

; TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,

; ADDRESS: CECCHI, STEWART & OLSTEIN

; STREET: 6 BECKER FARM ROAD

; CITY: ROSELAND

; STATE: NEW JERSEY

; COUNTRY: USA

; ZIP: 07068

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5 INCH DISKETTE

; COMPUTER: IBM PS/2

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: WORD PERFECT 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/208,339A

; FILING DATE: 8 MARCH 1994

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: FERRARO, GREGORY D.

; REGISTRATION NUMBER: 36,134

; REFERENCE/DOCKET NUMBER: 325800-77

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 201-994-1700

; TELEFAX: 201-994-1744

; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 89 AMINO ACIDS

; TYPE: AMINO ACID

; STRANDEDNESS:

; TOPOLOGY: LINEAR

; MOLECULE TYPE: PROTEIN

US-08-208-339A-4

;; EARLIER FILING DATE: 1995-06-06
;; EARLIER APPLICATION NUMBER: US 08/468,775
;; EARLIER FILING DATE: 1995-06-06
;; EARLIER APPLICATION NUMBER: US 08/722,719
;; EARLIER FILING DATE: 1996-09-30
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 6
;; LENGTH: 89
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-334-951-6

Query Match 34.3%; Score 131; DB 4; Length 89;
Best Local Similarity 37.5%; Pred. No. 5.6e-10;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

QY 4 GANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDKEICADPRVPYLYKMI 63
||| ||| | : : : : : || ||| : ||| | : : : : :
Db 24 GTNKE--LCCLVYTSWQIQKFIYDSETSPQCPKPGVLLTKRGRICADPNKKWQKY 81

QY 64 LNKL 67
Db 82 ISDL 85

RESULT 15
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Seilhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO

; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
US-08-375-346A-6

Query Match 33.8%; Score 129; DB 1; Length 78;
Best Local Similarity 39.7%; Pred. No. 8.8e-10;
Matches 23; Conservative 14; Mismatches 19; Indels 2; Gaps 1;

QY 4 GANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDKEICADPRVPYLYK 61
||| ||| | : : : : : || ||| : ||| | : : : : :
Db 22 GTNKE--LCCLVYTSWQIQKFIYDSETSPQCPKPGVLLTKRGRICADPNKKWVO 77

Search completed: July 28, 2003, 04:05:37
Job time : 6.79832 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.42227 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165a-31

Perfect score: 382

Sequence: 1 GPGANMEDSVCCRDYVRYR.....EICADPRVPYKLMINKLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 11875970 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
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7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep1.*
11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2.*
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15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	374	97.9	93	10	US-09-837-446-6
2	374	97.9	93	11	US-09-811-088-2
3	374	97.9	93	15	US-10-314-410-2
4	369	96.6	93	10	US-09-908-599-2
5	369	96.6	93	10	US-09-908-600-2
6	256	67.0	68	15	US-10-001-221A-3
7	213	55.8	37	10	US-09-864-761-43730
8	202.5	53.0	67	15	US-10-001-221A-7
9	141	36.9	71	10	US-09-144-838-3
10	140	36.6	78	15	US-10-001-221A-6
11	133	34.8	69	11	US-09-792-793A-28
12	133	34.8	89	10	US-09-334-923A-6
13	133	34.8	89	10	US-09-334-954A-6
14	133	34.8	97	10	US-09-325-302-792
15	132	34.6	73	10	US-09-144-838-6
16	131	34.3	70	10	US-09-334-923A-65

17	131	34.3	70	10	US-09-334-954A-65	Sequence 65, Appl
18	129	33.8	78	15	US-10-158-366-6	Sequence 6, Appl
19	126	33.0	89	10	US-09-834-795A-34	Sequence 34, Appl
20	126	33.0	89	12	US-09-834-794A-34	Sequence 34, Appl
21	122	31.9	72	10	US-09-144-838-5	Sequence 5, Appl
22	121	31.7	67	10	US-09-144-838-41	Sequence 41, Appl
23	121	31.7	68	15	US-10-141-620-17	Sequence 18, Appl
24	121	31.7	92	15	US-10-141-620-17	Sequence 17, Appl
25	121	31.7	113	14	US-10-293-050-4	Sequence 4, Appl
26	119	31.2	68	10	US-09-144-838-10	Sequence 10, Appl
27	119	31.2	68	10	US-09-144-838-42	Sequence 42, Appl
28	119	31.2	68	10	US-09-195-457-11	Sequence 11, Appl
29	119	31.2	68	11	US-09-792-793A-29	Sequence 29, Appl
30	119	31.2	91	8	US-08-927-939-21	Sequence 21, Appl
31	119	31.2	91	10	US-09-144-838-9	Sequence 9, Appl
32	119	31.2	91	10	US-09-834-795A-29	Sequence 29, Appl
33	119	31.2	91	12	US-09-834-794A-29	Sequence 29, Appl
34	119	31.2	91	12	US-09-920-137A-8	Sequence 8, Appl
35	119	31.2	91	12	US-09-537-858-1	Sequence 1, Appl
36	119	31.2	91	15	US-10-158-366-5	Sequence 5, Appl
37	119	31.2	91	15	US-10-057-275-8	Sequence 8, Appl
38	119	31.2	91	15	US-10-293-705-12	Sequence 12, Appl
39	117	30.6	66	10	US-09-144-838-37	Sequence 37, Appl
40	117	30.6	66	15	US-10-141-620-19	Sequence 19, Appl
41	117	30.6	69	10	US-09-195-457-9	Sequence 9, Appl
42	117	30.6	70	11	US-09-792-793A-24	Sequence 24, Appl
43	117	30.6	91	15	US-10-153-064-3	Sequence 3, Appl
44	117	30.6	92	8	US-08-927-939-19	Sequence 19, Appl
45	117	30.6	92	10	US-09-151-450-3	Sequence 3, Appl

ALIGNMENTS

RESULT 1

US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; FILE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 97.9%; Score 374; DB 10; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.4e-39;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60

Db 25 GPGANMEDSVCCRDYVRYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84

Qy 61 KMLINKLSQ 69

Db 85 KMLINKLSQ 93

RESULT 2

US-09-811-088-2

; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match 97.9%; Score 374; DB 11; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.4e-39;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
|||||
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84
|||||

QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93
|||||

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; PRIOR FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match 97.9%; Score 374; DB 15; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.4e-39;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
|||||
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84
|||||

QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93
|||||

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PF17P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match 96.6%; Score 369; DB 10; Length 93;
Best Local Similarity 95.7%; Pred. No. 5.8e-39;
Matches 66; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84
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QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93
|||||

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,

```

: STATE: MD
: COUNTRY: 20850
: ZIP: US
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/908,600
: FILING DATE: 20-Jul-2001
: CLASSIFICATION: <unknown>
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 09/484,221
: FILING DATE: <unknown>
: ATTORNEY/AGENT INFORMATION:
: NAME: BROOKES, ANDERS A
: REGISTRATION NUMBER: 36,373
: REFERENCE/DOCKET NUMBER: PFI77PP
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (301) 309-8504
: TELEFAX: (301) 309-8512
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 93 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match 96.6%; Score 369; DB 10; Length 93;
Best Local Similarity 95.7%; Pred. No. 5.8e-39;
Matches 66; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVVLTFTRDKKEICADPRVPYL 60
Db 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVVLTFTRDKKEICADPRVPW 84

Qy 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 6
US-10-001-221A-3
: Sequence 3, Application US/10001221A
: Publication No. US20030108515A1
: GENERAL INFORMATION:
: APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
: APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
: TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
: FILE REFERENCE: 10709/14
: CURRENT APPLICATION NUMBER: US/10/001,221A
: CURRENT FILING DATE: 2001-10-30
: PRIOR APPLICATION NUMBER: 09/834,814
: PRIOR FILING DATE: 2001-04-20
: NUMBER OF SEQ ID NOS: 7
: SOFTWARE: PatentIn version 3.1
: SEQ ID NO 3
: LENGTH: 68
: TYPE: PRT
: ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 67.0%; Score 256; DB 15; Length 68;
Best Local Similarity 61.8%; Pred. No. 6.5e-25;
Matches 42; Conservative 17; Mismatches 9; Indels 0; Gaps 0;

Qy 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVVLTFTRDKKEICADPRVPYL 60
Db 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVVLTFTRDKKEICADPRQVW 60
US-09-864-761-43730
: Sequence 43730, Application US/09864761
: Patent No. US20020048763A1
: GENERAL INFORMATION:
: APPLICANT: Penn, Sharron G.
: APPLICANT: Rank, David R.
: APPLICANT: Hanzel, David K.
: APPLICANT: Chen, Wensheng
: TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
: FILE REFERENCE: Aecomica-X-1
: CURRENT APPLICATION NUMBER: US/09/864,761
: CURRENT FILING DATE: 2001-05-23
: PRIOR APPLICATION NUMBER: US 60/180,312
: PRIOR FILING DATE: 2000-02-04
: PRIOR APPLICATION NUMBER: US 60/207,456
: PRIOR FILING DATE: 2000-05-26
: PRIOR APPLICATION NUMBER: US 09/632,366
: PRIOR FILING DATE: 2000-08-03
: PRIOR APPLICATION NUMBER: GB 24263.6
: PRIOR FILING DATE: 2000-10-04
: PRIOR APPLICATION NUMBER: US 60/236,359
: PRIOR FILING DATE: 2000-09-27
: PRIOR APPLICATION NUMBER: PCT/US01/00666
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00667
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00664
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00669
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00665
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00668
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00663
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00662
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00661
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00670
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: US 60/234,687
: PRIOR FILING DATE: 2000-09-21
: PRIOR APPLICATION NUMBER: US 09/608,408
: PRIOR FILING DATE: 2000-06-30
: PRIOR APPLICATION NUMBER: US 09/774,203
: PRIOR FILING DATE: 2001-01-29
: NUMBER OF SEQ ID NOS: 49117
: SOFTWARE: Annonmax Sequence Listing Engine vers. 1.1
: SEQ ID NO 43730
: LENGTH: 37
: TYPE: PRT
: ORGANISM: Homo sapiens
: FEATURE:
: OTHER INFORMATION: MAP TO AC004382.1
: OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
: OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
: OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
: OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
: OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
: OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
: OTHER INFORMATION: EST HUMAN HIT: W61220.1, EVALUATE 8.50e-01
: OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUATE 3.00e-18
US-09-864-761-43730
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Query Match 55.8%; Score 213; DB 10; Length 37;
Best Local Similarity 100.0%; Pred. No. 8.4e-20;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGV 41
DB 1 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGV 37
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RESULT 8
US-10-001-221A-7
; Sequence 7, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; CURRENT FILING DATE: 2001-04-20
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 7
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match 53.0%; Score 202.5; DB 15; Length 67;
Best Local Similarity 55.4%; Pred. No. 3.3e-18;
Matches 36; Conservative 15; Mismatches 9; Indels 5; Gaps 1;

QY 9 DSV-----CCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLKMI 63
DB 3 DSVSIPITCCQDYIRHPLPSRLVKFEFFWTSCRKPGVLLTVKNRDICADPRQVWVKL 62
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QY 64 LNKLS 68
DB 63 LHKLS 67
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RESULT 9
US-09-144-838-3
; Sequence 3, Application US/09144838A
; Patent No. US20020051996A1
; GENERAL INFORMATION:
; APPLICANT: Siani, Michael A.
; APPLICANT: Wilken, Jill
; APPLICANT: Simon, Reyna
; APPLICANT: Kent, Stephen B.H.
; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
; FILE REFERENCE: GRFN-020/01US
; CURRENT APPLICATION NUMBER: US/09/144,838A
; CURRENT FILING DATE: 1998-08-31
; EARLIER APPLICATION NUMBER: US 60/057,620
; EARLIER FILING DATE: 1997-09-04
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 71
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 36.9%; Score 141; DB 10; Length 71;
Best Local Similarity 39.3%; Pred. No. 1.9e-10;
Matches 22; Conservative 19; Mismatches 15; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLKMI 67
DB 12 CCYGFQOHPPVQIILKENYPTSPACKPGVILLTKRGQICADPSKNNVRLMQRL 67
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RESULT 10
US-10-001-221A-6
; Sequence 6, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; CURRENT FILING DATE: 2001-04-20
; PRIOR APPLICATION NUMBER: 09/834,814
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 6
; LENGTH: 78
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 36.6%; Score 140; DB 15; Length 78;
Best Local Similarity 38.0%; Pred. No. 2.8e-10;
Matches 27; Conservative 18; Mismatches 24; Indels 2; Gaps 2;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVP 58
DB 1 GPGANVEDSICCFWVNRKIPQRLSYTRITNQCPEAVIFKKTQKGKVCADPKER 60
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QY 59 YLKMI 69
DB 61 WVRDSMKHLQ 71
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RESULT 11
US-09-792-793A-28
; Sequence 28, Application US/09792793A
; Patent No. US20020168370A1
; GENERAL INFORMATION:
; APPLICANT: McDonald, John R.
; APPLICANT: Cogging, Phillip
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
; FILE REFERENCE: 25020-601D
; CURRENT APPLICATION NUMBER: US/09/792,793A
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 28
; LENGTH: 69
; TYPE: PRT
; ORGANISM: homo sapien
; FEATURE:
; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 34.8%; Score 133; DB 11; Length 69;
Best Local Similarity 37.5%; Pred. No. 1.9e-09;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLKMI 63
DB 4 GTNKE--LCCLVYTSWQIPQKFIQVDSYSETSPQCPKPGVILLTKRGQICADPNKKWVQKY 61
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QY 64 LNKI 67

Query Match 34.6%; Score 132; DB 10; Length 73;
Best Local Similarity 41.1%; Pred. No. 2.7e-09;
Matches 23; Conservative 14; Mismatches 19; Indels 0; Gaps 0;

QY 12 CCRDYVRRLPLRVVVKHFYTSDSGRPGWLLTFRDKEICADPRVPYLKMINKL 67
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Db 14 .CLGYOKRPLPQVLLSSWYPTSQLCPKPGVFELTKRGRTCADPSKNWVRQLMORL 69

Search completed: July 28, 2003, 04:20:05
Job time : 10.4223 secs

GenCore version 5.1.6
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OW protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 79.1471 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-31
Perfect score: 382
Sequence: 1 GPYCANMEDSVCCRDYVRYR.....EICADPRPVYKILNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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6: /cgn2_6/ptodata/1/paa/US082_COMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	382	100.0	69	13 US-08-939-107-31	Sequence 31, Appl
2	382	100.0	69	14 US-09-067-447-31	Sequence 31, Appl
3	382	100.0	69	14 US-09-067-447-31	Sequence 31, Appl
4	382	100.0	69	14 US-09-067-447B-31	Sequence 31, Appl
5	382	100.0	69	19 US-09-509-165A-31	Sequence 31, Appl
6	374	97.9	69	27 US-60-412-866-1	Sequence 1, Appli

7	374	97.9	70	13	US-08-939-107-30	Sequence 30, Appl
8	374	97.9	70	14	US-09-067-447-30	Sequence 30, Appl
9	374	97.9	70	14	US-09-067-447-30	Sequence 30, Appl
10	374	97.9	70	14	US-09-067-447B-30	Sequence 30, Appl
11	374	97.9	70	19	US-09-509-165A-30	Sequence 30, Appl
12	374	97.9	86	13	US-08-925-857-10	Sequence 10, Appl
13	374	97.9	93	1	PCT-US00-00953-6	Sequence 6, Appli
14	374	97.9	93	8	US-08-464-594-2	Sequence 2, Appli
15	374	97.9	93	8	US-08-479-620-2	Sequence 2, Appli
16	374	97.9	93	9	US-08-558-658-2	Sequence 2, Appli
17	374	97.9	93	11	US-08-760-127-3	Sequence 3, Appli
18	374	97.9	93	12	US-08-820-364-2	Sequence 2, Appli
19	374	97.9	93	13	US-08-925-857-12	Sequence 12, Appl
20	374	97.9	93	13	US-08-931-764-2	Sequence 2, Appli
21	374	97.9	93	13	US-08-931-764B-2	Sequence 2, Appli
22	374	97.9	93	13	US-08-939-107-2	Sequence 2, Appli
23	374	97.9	93	14	US-09-067-447-2	Sequence 2, Appli
24	374	97.9	93	14	US-09-067-447B-2	Sequence 2, Appli
25	374	97.9	93	14	US-09-067-447B-2	Sequence 2, Appli
26	374	97.9	93	19	US-09-509-165A-2	Sequence 2, Appli
27	374	97.9	93	19	US-09-591-992-2	Sequence 2, Appli
28	374	97.9	93	21	US-09-712-726-2	Sequence 2, Appli
29	374	97.9	93	21	US-09-791-537-22726	Sequence 22726, A
30	374	97.9	93	22	US-09-811-088-2	Sequence 2, Appli
31	374	97.9	93	22	US-09-837-446-6	Sequence 6, Appli
32	374	97.9	100	21	US-09-760-476-2007	Sequence 2007, Ap
33	374	97.9	100	21	US-09-760-481-204	Sequence 204, App
34	374	97.9	100	26	US-10-216-245-2007	Sequence 2007, Ap
35	374	97.9	100	26	US-10-216-388-204	Sequence 204, App
36	374	97.9	100	26	US-10-217-651-449	Sequence 449, App
37	374	97.9	154	13	US-08-939-107-40	Sequence 40, Appl
38	374	97.9	154	14	US-09-067-447-40	Sequence 40, Appl
39	374	97.9	154	14	US-09-067-447-40	Sequence 40, Appl
40	374	97.9	154	14	US-09-067-447B-40	Sequence 40, Appl
41	374	97.9	154	19	US-09-509-165A-40	Sequence 40, Appl
42	374	97.9	172	20	US-09-646-028-49	Sequence 49, Appl
43	374	97.9	334	20	US-09-646-028-53	Sequence 53, Appl
44	374	97.9	587	20	US-09-646-028-50	Sequence 50, Appl
45	369	96.6	93	1	PCT-US00-30237-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-08-939-107-31
; Sequence 31, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MFC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939.107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.
;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/33318
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 31:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-08-939-107-31

Query Match 100.0%; Score 382; DB 13; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
QY 61 KMILNKLSQ 69
|||||
Db 61 KMILNKLSQ 69
|||||

RESULT 2

US-09-067-447-31
;; Sequence 31, Application US/09067447
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald W.
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
;; NUMBER OF SEQUENCES: 44
;; CORRESPONDENCE ADDRESSES:
;; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
;; STREET: 6300 Sears Tower, 233 South Wacker Drive
;; CITY: Chicago
;; STATE: Illinois
;; COUNTRY: United States of America
;; ZIP: 60606-6402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/067,447
;; FILING DATE:
;; CLASSIFICATION:
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/939,107
;; FILING DATE: 26-SEPT-1997
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/660,542
;; FILING DATE: 7-JUN-1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/558,658
;; FILING DATE: 16-NOV-1995
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.

;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/34404
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 31:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-09-067-447-31

Query Match 100.0%; Score 382; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
QY 61 KMILNKLSQ 69
|||||
Db 61 KMILNKLSQ 69
|||||

RESULT 3

US-09-067-447-31
;; Sequence 31, Application US/09067447A
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
;; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
;; FILE REFERENCE: 27866/34404
;; CURRENT APPLICATION NUMBER: US/09/067,447A
;; CURRENT FILING DATE: 1998-04-28
;; EARLIER APPLICATION NUMBER: 08/939,107
;; EARLIER FILING DATE: 1997-09-26
;; EARLIER APPLICATION NUMBER: 08/660,542
;; EARLIER FILING DATE: 1996-06-07
;; EARLIER APPLICATION NUMBER: 08/558,658
;; EARLIER FILING DATE: 1995-11-16
;; EARLIER APPLICATION NUMBER: 08/479,620
;; EARLIER FILING DATE: 1995-06-07
;; NUMBER OF SEQ ID NOS: 44
;; SOFTWARE: PatentIn Ver. 2.0.
;; SEQ ID NO 31
;; LENGTH: 69
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-31

Query Match 100.0%; Score 382; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
QY 61 KMILNKLSQ 69
|||||
Db 61 KMILNKLSQ 69
|||||

RESULT 4

APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Cass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-939-107-30

Query Match 97.9%; Score 374; DB 13; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPYL 60
Db 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPVW 61

QY 61 KMLNKLQ 69
Db 62 KMLNKLQ 70

RESULT 8
US-09-067-447-30
Sequence 30, Application US/09067447
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America

ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Cass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-067-447-30

Query Match 97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPYL 60
Db 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFRDKKEICADPRVPVW 61

QY 61 KMLNKLQ 69
Db 62 KMLNKLQ 70

RESULT 9
US-09-067-447-30
Sequence 30, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER FILING DATE: 08/939,107
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER FILING DATE: 1996-06-07
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/479,620
EARLIER FILING DATE: 1995-06-07

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; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447B-30

Query Match          97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 10
US-09-067-447B-30
; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match          97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 11
US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match          97.9%; Score 374; DB 19; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVYRPLRLPLRVVVKHFYWTSDSCPRGCVLLTFDRDKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 12
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
```

```

QY 61 KMILNKLQSQ 69
   |||||
Db 85 KMILNKLQSQ 93

RESULT 14
US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 97.9% Score 374; DB 8; Length 93;
Best Local Similarity 97.1% Pred. No. 7.8e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKETCADPRVPYL 60
   |||||
Db 25 GPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKETCADPRVPW 84

QY 61 KMILNKLQSQ 69
   |||||
Db 85 KMILNKLQSQ 93

RESULT 15
US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive

```

;; CITY: Chicago
;; STATE: Illinois
;; COUNTRY: United States of America
;; ZIP: 60606-6402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/479,620
;; FILING DATE:
;; CLASSIFICATION: 536
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.
;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/32628
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 2:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 93 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
US-08-479-620-2

Query Match 97.9%; Score 374; DB 8; Length 93;
Best Local Similarity 97.1%; Pred. No. 7.8e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 1 GPYGANMEDSVCCRDYVRYRLPLRVVYKHFWYWTSDSCPRPGVYLLTFRDKKEICADPRVPYL 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVYKHFWYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
Qy 61 KWLNLKLSQ 69
Db 85 KWLNLKLSQ 93

Search completed: July 28, 2003, 04:14:54
Job time : 79.1471 secs

RESULT 2
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.

; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match 97.9%; Score 374; DB 2; Length 93;

Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
Db |||||||||||
85 KMILNKLSQ 93

RESULT 3

PCT-US02-35606-146

; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 146
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 97.9%; Score 374; DB 2; Length 93;

Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
Db |||||||||||
85 KMILNKLSQ 93

RESULT 4

PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950

; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 97.9%; Score 374; DB 2; Length 93;

Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
Db |||||||||||
85 KMILNKLSQ 93

RESULT 5

PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens

PCT-US02-40891-549

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84

QY 61 KMLNKLQ 69
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DB 85 KMLNKLQ 93

RESULT 6

PCT-US02-40891-638
; Sequence 638, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84

QY 61 KMLNKLQ 69
|||||
DB 85 KMLNKLQ 93

RESULT 7

PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT

; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84

QY 61 KMLNKLQ 69
|||||
DB 85 KMLNKLQ 93

RESULT 8

PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28

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; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
      |||||||

QY 61 KMILNKLQ 69
      |||||||
DB 85 KMILNKLQ 93
      |||||||

RESULT 9
PCT-US02-40891-641
; Sequence 641, Application PC/TUS02/40891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match          97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
      |||||||
DB 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
      |||||||

QY 61 KMILNKLQ 69
      |||||||
DB 85 KMILNKLQ 93
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RESULT 10
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
      |||||||
DB 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
      |||||||

QY 61 KMILNKLQ 69
      |||||||
DB 85 KMILNKLQ 93
      |||||||

RESULT 11
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match          97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
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Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
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Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
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Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 12
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

Query Match 97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
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Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 13
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: IAKOUBOVA, Olga
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-8659

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
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Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
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RESULT 14
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: LUKE, May
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-050-8659

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 15
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-455-444-4765

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
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Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
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Search completed: July 28, 2003, 04:18:50
Job time : 24.3529 secs

C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell

A:Gene: GDB:SCYA3
A:Cross-references: GDB:l20368; OMIM:l82283
A:Map position: 17q11-17q21
C:Superfamily: macrophage inflammatory protein
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F:33-57,34-73/Disulfide bonds: #status predicted

Query Match 30.6%; Score 117; DB 2; Length 92;
Best Local Similarity 31.0%; Pred. NO. 3.4e-07;
Matches 18; Conservative 16; Mismatches 24; Indels 0; Gaps 0;

QY 10 SVCCRDVRYRLPLRVKVFHYWTSDSCPGRGVLLTFRDKETCAIDPRVPYLKMILNKL 67
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Db 31 TACCFYSYTRQIPQNFIADYFETSSQCSKPGVIFLTKRSQVCADPSEEWQKYVSDL 88

RESULT 6
A31767
macrophage inflammatory protein 1-beta precursor [validated] - human
N:Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation g
protein 2 (Act-2); T-cell activation protein gamma
C:Species: Homo sapiens (man)
C>Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
C:Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30552
R:Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pez
Mol. Immunol. 27, 1091-1102, 1990
A>Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
A:Reference number: JH0319; MUID:91061800; PMID:2247088
A:Accession: JH0319
A>Status: translation not shown
A:Molecule type: DNA
A:Molecule type: DNA
A:Residues: 1-92 <BAI>
A:Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
R:Experimental source: natural killer cell, strain CB3-CD2+, F5, 5IIIE5
R:Napolitano, M.; Modi, W.S.; Cewario, S.J.; Gnarr, J.R.; Seunaez, H.N.; Leonard, W.
J. Biol. Chem. 266, 17531-17536, 1991
A>Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsi
A:Reference number: A40978; MUID:91373378; PMID:1894635
A:Accession: A40978
A:Molecule type: DNA
A:Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
A:Cross-references: GB:M69201; NID:gl78021
A>Note: 15-Ala was also found
R:Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
A>Title: Identification, cloning, and characterization of an immune activation gene.
A:Reference number: A31767; MUID:89071764; PMID:2462251
A:Accession: A31767
A:Molecule type: mRNA
A:Residues: 1-92 <LTP>
A:Cross-references: GB:J04130; NID:gl78017; PIDN:AAA51576.1; PID:gl78018
R:Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
A>Title: Isolation and characterization of a cDNA encoding a putative cytokine which
A:Reference number: A37411; MUID:89325421; PMID:2568930
A:Accession: A37411
A:Molecule type: mRNA
A:Residues: 1-92 <CHA>
A:Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
A>Title: Mitogenic activation of human T cells induces two closely related genes whic
A:Reference number: A30574; MUID:89140347; PMID:2521882
A:Accession: B30574
A:Molecule type: mRNA
A:Residues: 1-19, 'L', 21-92 <ZIP>
A:Cross-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
R:Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A>Title: A novel polypeptide secreted by activated human T lymphocytes.
A:Reference number: A45817; MUID:90038522; PMID:2809212
A:Accession: B45817

C.Comment: This protein is a monokine.

C:Genetics:

A:Introns: 26/1; 64/2

C:Superfamily: macrophage inflammatory protein

C:Keywords: glycoprotein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>

F:76/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 28.9%; Score 110.5; DB 2; Length 92;
Best Local Similarity 36.4%; Pred. No. 2.4e-06;
Matches 24; Conservative 12; Mismatches 29; Indels 1; Gaps 1;

QY 2 PYGANMEDSVCCRDYYRVLPLRVKHFVWTSDSCPRPGVVLLTFRDKEICADRPVPYLK 61
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Db 25 PWGSDPPTS-CCEFSYTSRQLHRSFVDYDYETSLCSKPAAVVELTKRGQCINSEPMT 83
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QY 62 MILNKL 67
: |
Db 84 EYMSDL 89

RESULT 8

B35673

LD78-beta protein precursor - human

N/N:Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducible N

C:Species: Homo sapiens (man)

C>Date: 28-Sep-1990 #sequence.revision 28-Sep-1990 #text_change 20-Jun-2000

C:Accession: B35673; B30412; S10157; B30508

R:Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990

A:Title: Structures of human genes coding for cytokine LD78 and their expression.

A:Reference number: A35673; PMID:90287155; PMID:1694014

A:Accession: B35673

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-93 <NAK>

A:Cross-references: GB:D90145; NID:g219907; PIDN:BAAL1473.1; PID:g219908

R:Bium, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990

A:Title: Three human homologs of a murine gene encoding an inhibitor of stem cell tri

A:Reference number: A30412; MUID:91103879; PMID:2271120

A:Accession: B30412

A>Status: preliminary; not compared with conceptual translation

A:Molecule type: DNA

A:Residues: 1-93 <BUO>

A:Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g18284

R:Irving, S.G.; Zipfel, P.F.; Balke, J.; McBrilde, O.W.; Morton, C.C.; Burd, P.R.; m

Nucleic Acids Res. 18, 3261-3270, 1990

A:Title: Two inflammatory mediator cytokine genes are closely linked and variably m

A:Reference number: S10157; MUID:90287702; PMID:1972563

A:Accession: S10157

A>Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-93 <IR>

A:Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666

C.Comment: This protein is a member of a "small inducible" or "activation specific"

C:Genetics:

A:Gene: GDB:SCYA4

A:Cross-references: GDB:120369; OMIM:182284

A:Map position: 17q11-17q21

A:Introns: 26/1; 64/2

C:Superfamily: macrophage inflammatory protein

C:Keywords: cytokine

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-92/Product: LD78-beta protein #status predicted <MAT>

Query Match 28.8%; Score 110; DB 2; Length 93;
Best Local Similarity 29.3%; Pred. No. 2.4e-06;
Matches 17; Conservative 16; Mismatches 25; Indels 0; Gaps 0;

QY 10 SVCCRDYYRVLPLRVKHFVWTSDSCPRPGVVLLTFRDKEICADRPVPYLKMILNKL 67
: | | | | : | | : : : | | | | | | | | | | | | | | | | | | | | | | | | | | | |

A:Accession: JN0128
A:Molecule type: mRNA
A:Residues: 1-148 <YOS>

A:Cross-references: GB:M57441; NID:g205333; PIDN:AAA63496.1; PID:g205334
A:Experimental source: spleen cells
A:Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue 6
A:Genetics:

C:Introns: 26/1; 65/2

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-148/Product: immediate-early serum-responsive protein JE #status predicted <MAT>

Query Match 25.5%; Score 97.5; DB 1; Length 148;

Best Local Similarity 33.9%; Pred. No. 0.00013;

Matches 20; Conservative 12; Mismatches 26; Indels 1; Gaps 1;

QY 12 CCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYKMLNKLQ 69

DB 34 CCYSTGKMPMSRLNKYRITSSRCPEAVVFVTKLKEICADPNKQVYRKLDQ 92

RESULT 13

JC2417

monocyte chemoattractant protein-2 precursor - pig

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999

C:Accession: JC2417

R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.

Biochem. Biophys. Res. Commun. 205, 148-153, 1994

A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis

A:Reference number: JC2417; MUID:95091716; PMID:7999015

A:Accession: JC2417

A:Molecule type: mRNA

A:Residues: 1-99 <HOS>

A:Cross-references: GB:Z48480; NID:g683718; PIDN:CAR88371.1; PID:g683719

A:Experimental source: corpus luteum

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 24.9%; Score 95; DB 2; Length 99;

Best Local Similarity 31.3%; Pred. No. 0.00018;

Matches 21; Conservative 15; Mismatches 25; Indels 6; Gaps 2;

QY 9 DSV-----CCRDYVRYRLPLRVKHF-YWTSDSCPRPGVLLTFRDKKEICADPRVPYKLM 62

DB 26 DSVSIPITCCGLVNGKIPFKLESYTRITNSQCPEAVIFKTRADKEVCADPQCKVQN 85

QY 63 ILNKLQ 69

DB 86 SMKLLDQ 92

RESULT 14

I49555

gene C10 protein - mouse

C:Species: Mus musculus (house mouse)

C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999

C:Accession: I49555

R:Orlowski, A.; Berger, M.S.; Prystowsky, M.B.

Cell Regul. 2, 403-412, 1991

A:Title: Novel expression pattern of a new member of the MIP-1 family of cytokine-like

A:Reference number: I49555; MUID:91370083; PMID:1832565

A:Accession: I49555

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-116 <RES>

A:Cross-references: GB:M58004; NID:g192243; PIDN:AAA37329.1; PID:g192244

C:Gene: C10

C:Superfamily: macrophage inflammatory protein

Query Match 24.5%; Score 93.5; DB 2; Length 116;

Best Local Similarity 30.0%; Pred. No. 0.00033;

Matches 18; Conservative 16; Mismatches 25; Indels 1; Gaps 1;

QY 10 SVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYKMLNKLQ 69

DB 48 SDCCFSVAT-QIPCKRFYIYFPTSGGCIKPGIIFISRRGTQVCADPSDRVQRCLSTLQ 106

RESULT 15

A60299

monocyte chemoattractant protein 1 precursor - human

N:Alternate names: GDCF-1; glioma-derived monocyte chemoattractant factor 1; MCAF; MCP-2

C:Contains: glioma-derived chemotactic factor 2 (GDCF-2)

C:Species: Homo sapiens (man)

C:Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999

C:Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488

R:Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.

Biochem. Biophys. Res. Commun. 169, 346-351, 1990

A:Title: Structure of human monocyte chemoattractant protein gene and its regulation by T

A:Reference number: A35474; MUID:90290466; PMID:2357211

A:Accession: A35474

A:Molecule type: DNA

A:Residues: 1-99 <SHY>

A:Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124

R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.

Mol. Cell. Biol. 9, 4687-4695, 1989

A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.

A:Reference number: A33476; MUID:90097880; PMID:2513477

A:Accession: A33476

A:Molecule type: mRNA

A:Residues: 1-99 <ROL>

A:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; I

R:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.

FEBS Lett. 244, 487-493, 1989

A:Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning

A:Reference number: S03339; MUID:89153605; PMID:2465924

A:Accession: S03339

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <YOS>

A:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514

A:Experimental source: glioma cell line U-105MG

R:Yoshimura, T.; Leonard, E.J.

Adv. Exp. Med. Biol. 305, 47-56, 1991

A:Title: Human monocyte chemoattractant protein-1 (MCP-1).

A:Reference number: I51841; MUID:92095166; PMID:1661560

A:Accession: I51841

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-99 <YOS>

A:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868

R:Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.

Int. J. Cancer 45, 795-797, 1990

A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotac-1

-1/MCAF).

A:Reference number: A60299; MUID:90216082; PMID:2182547

A:Accession: A60299

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <BOT>

R:Furutani, Y.; Nomura, H.; Notake, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C

Biochem. Biophys. Res. Commun. 159, 249-255, 1989

A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and acti-a

A:Reference number: A32300; MUID:89165862; PMID:2923622

A:Accession: A32300

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <FUR>

A:Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163

R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz

Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989

A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative

A:Reference number: A32396; MUID:89184525; PMID:2648385
 A:Accession: A32396
 A:Molecule type: protein
 A:Residues: 'X',25-99 <ROB>
 R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
 Biochem. Biophys. Res. Commun. 167, 904-909, 1990
 A:Title: Identification of the monocyte chemotactic protein from human osteosarcoma cell
 A:Reference number: A34561; MUID:90211336; PMID:2322286
 A:Accession: A34561
 A:Molecule type: protein
 A:Residues: 29-33,'XX',36-52;82-92 <DEC>
 R:Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
 Mol. Cell. Biochem. 126, 61-68, 1993
 A:Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular endoth
 A:Reference number: I57488; MUID:94150478; PMID:8107690
 A:Accession: I57488
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-99 <LIY>
 A:Cross-references: GB:S69738; NID:g545464; PIDN:AAB29926.1; PID:g545465
 R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
 Chinese J. Microbiol. Immunol. 14, 28-32, 1994
 A:Title: The PCR cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1)
 A:Reference number: JCI096
 A:Accession: JCI096
 A:Molecule type: mRNA
 A:Residues: 24-28,'Q',30-99 <YEQ>
 C:Genetics:
 A:Gene: GDB:SCYA2
 A:Cross-references: GDB:125279; OMIM:158105
 A:Map position: l7q11.2-17q12
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
 F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA
 F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experime
 F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 24.3%; Score 93; DB 2; Length 99;
 Best Local Similarity 27.0%; Pred. No. 0.00032;
 Matches 20; Conservative 18; Mismatches 30; Indels 6; Gaps 2;

QY	2	PGYANNEDSV-----CCRDYVRYRLPL-RVVKHFYWTSDCPRPGVVLTLFRDKKICADP	55
Db	19	PQGLAQPDALNAPVTCYNTNFKISVQRLASYRITSSKCPKEAVIFKTIKICADP	78
QY	56	RVPLKMLNKLQ	69
Db	79	KQKWQDSMDHLDK	92

Search completed: July 28, 2003, 04:15:51
 Job time : 7.81303 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.62395 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-31
Perfect score: 382
Sequence: 1 GPGANNEDSVCCRDYVR.....EICADPRVPLKMLNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	374	97.9	93	1 SY22_HUMAN	O00626 homo sapien
2	256	67.0	92	1 SY22_MOUSE	O88430 mus musculus
3	133	34.8	89	1 SY18_HUMAN	P55774 h small ind
4	129	33.8	92	1 SY03_RAT	P50229 rattus norv
5	125.5	32.9	90	1 SY04_CHICK	Q08026 gallus gall
6	121	31.7	113	1 SY15_HUMAN	Q16663 homo sapien
7	119	31.2	91	1 SY05_HUMAN	P13501 homo sapien
8	119	31.2	92	1 SY03_MOUSE	P10855 mus musculus
9	117.5	30.8	104	1 SY12_MOUSE	Q62401 mus musculus
10	117	30.6	91	1 SY05_MOUSE	P30882 mus musculus
11	117	30.6	92	1 SY03_HUMAN	P10147 homo sapien
12	117	30.6	92	1 SY05_RAT	P50231 rattus norv
13	116.5	30.5	92	1 SY04_RAT	P50230 rattus norv
14	114	29.8	93	1 SY14_HUMAN	Q16627 homo sapien
15	113.5	29.7	94	1 SY17_HUMAN	Q92583 homo sapien
16	113	29.6	94	1 VM12_KSHV	Q98157 kaposi's sa
17	111.5	29.2	92	1 SY01_HUMAN	P13236 h small ind
18	111	29.1	91	1 SY05_CAVPO	P72722 cavia porce
19	110.5	28.9	92	1 SY04_MOUSE	P14097 mus musculus
20	110	28.8	93	1 SY13_HUMAN	P16619 homo sapien
21	106.5	27.9	70	1 REG1_BOVIN	P82943 bos taurus
22	106	27.7	91	1 SY05_BOVIN	Q97919 bos taurus
23	105	27.5	99	1 SY08_HUMAN	P80075 homo sapien
24	104	27.2	99	1 SY07_HUMAN	P80098 homo sapien
25	103	27.0	120	1 SY02_CAVPO	Q08782 cavia porce
26	100.5	26.3	98	1 SY19_HUMAN	Q99731 homo sapien
27	97.5	25.5	98	1 SY13_HUMAN	Q99616 homo sapien
28	97.5	25.5	108	1 SY19_MOUSE	O70460 mus musculus
29	97.5	25.5	119	1 SY24_MOUSE	Q91kc0 mus musculus
30	97.5	25.5	148	1 SY02_RAT	P14844 rattus norv
31	96	25.1	120	1 SY23_HUMAN	P55773 homo sapien
32	95	24.9	99	1 SY08_PIG	P49873 sus scrofa
33	94	24.6	94	1 SY26_HUMAN	Q9y258 homo sapien

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,			
RA	Leviton D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Macrophage;			
RC	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McIninch J., Elias C. III, Manthey C.L., Grosshans D.,			
RA	Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,			
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,			
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,			
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RC	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION.			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,			
RA	Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

P27784 mus musculus
P13500 homo sapien
Q9ymn4 macaca fasc
P46632 oryctolagus
O89093 mus musculus
P10148 mus musculus
O00175 homo sapien
Q09141 bos taurus
P28291 bos taurus
P51671 homo sapien
P52203 canis fami
Q29288 sus scrofa

SY06_MOUSE
SY02_HUMAN
SY02_MACFA
SY04_RABIT
SY20_MOUSE
SY02_MOUSE
SY24_HUMAN
SY08_BOVIN
MCPA_BOVIN
EOTA_HUMAN
SY02_CANFA
SY05_PIG

116 1
99 1
99 1
92 1
97 1
148 1
119 1
99 1
99 1
97 1
101 1
50 1

93.5 24.5
93 24.3
93 24.3
92.5 24.2
91 23.8
90.5 23.7
89.5 23.4
89 23.3
88.5 23.2
87.5 22.9
85 22.3
83.5 21.9

ALIGNMENTS

RN [1] SEQUENCE FROM N.A.
 RP Li H., Ruben S.;
 RA "Macrophage inflammatory protein-3 and -4";
 RL Patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE=Aorta, and Lung;
 RX MEDLINE=97376836; PubMed=9233607;
 RA Hieshima K., Inai T., Baba M., Shoudai K., Ishizuka K.,
 RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
 RA Miura K., Odenakker G., van Damme J., Yoshie O., Nomiyaama H.;
 RT "A novel human CC chemokine PARC that is most homologous to
 RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
 RT T lymphocytes, but not for monocytes";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98230488; PubMed=9570561;
 RA Kodelja V., Mueller C., Politz O., Haki N., Orfanos C.E., Goerdts S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 RT structural homologue of macrophage inflammatory protein-1 alpha with
 RT a Th2-associated expression pattern";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 RT of novel chemokines using the WorldWideWeb and expressed sequence tag
 RT databases";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RC TISSUE=Dendritic cell;
 RX MEDLINE=97336102; PubMed=9192897;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 RT naive T cells";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99168908; PubMed=10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiyaama H.;
 RT "Chemokine PARC gene (SCYA18) generated by fusion of two
 RT MIP-1alpha/LD78alpha-like genes";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE=99189237; PubMed=10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdts S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 RT within the first intron sequence";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES.
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,

CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
 CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; AB000221; BAA21670.1;
 DR EMBL; Y13710; CAA74039.1;
 DR EMBL; AB012113; BAA34368.1;
 DR EMBL; AF082214; AAC32287.1;
 DR EMBL; AF082212; AAC32287.1; JOINED.
 DR EMBL; AF082213; AAC32287.1; JOINED.
 DR EMBL; AF111198; AAD30390.1;
 DR HSP; P13236; IHUM.
 DR Genew; HGNC:10616; SCYA18.
 DR MIM; 603757;
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 20
 FT CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 FT DISULFID 30 54 BY SIMILARITY.
 FT DISULFID 31 70 BY SIMILARITY.
 SQ SEQUENCE 89 AA; 9849 MW; C287B94BC0518E4 CRC64;
 Query Match 34.8%; Score 133; DB 1; Length 89;
 Best Local Similarity 37.5%; Pred. No. 5.3e-10;
 Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;
 Qy 4 GANNEDSVCCRDYRVRLPLRVVYKHFYVTSDCSPRGVLLTFRDKREICADRPVYLMKI 63
 Db 24 GTNKE--LCCLVYTSWQIPQKFIYDYSQPCPKPGVILLTKRGICADPNKKWQKY 81
 Qy 64 LNKL 67
 Db 82 ISDL 85
 RESULT 4
 SY03_RAT STANDARD; PRT; 92 AA.
 AC P50229;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha).
 GN SCYA3 OR MIP1A.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CD-1; TISSUE=Lung;

RA Gallegos C., Coit D., Merryweather J., Cerami A.;
 RT "Cloning and characterization of a cDNA for murine macrophage
 RT inflammatory protein (MIP), a novel monokine with inflammatory and
 RT chemokinetic properties";
 RL J. Exp. Med. 167:1939-1944(1988).
 RN [2]
 RP REVISIONS.
 RA Davatellis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C.,
 RA Gallegos C., Coit D., Merryweather J., Cerami A.;
 RL J. Exp. Med. 170:2189-2199(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89093958; PubMed=2521353;
 RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
 RT "A family of small inducible proteins secreted by leukocytes are
 RT members of a new superfamily that includes leukocyte and
 RT fibroblast-derived inflammatory agents, growth factors, and
 RT indicators of various activation processes";
 RL J. Immunol. 142:679-687(1989).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX STRAIN=DBA/2J;
 RX MEDLINE=91016858; PubMed=2216738;
 RA Grove M., Lowe S., Graham G., Pragnell I., Plumb M.;
 RT "Sequence of the murine haemopoietic stem cell inhibitor/macrophage
 RT inflammatory protein 1 alpha gene";
 RL Nucleic Acids Res. 18:5561-5561(1990).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89184547; PubMed=2784565;
 RA Kwon B.S., Weissman S.M.;
 RT "cDNA sequences of two inducible T-cell genes";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91237116; PubMed=2033269;
 RA Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
 RA Cerami A.;
 RT "Genomic structure of murine macrophage inflammatory protein-1 alpha
 RT and conservation of potential regulatory sequences with a human
 RT homologue, ID78";
 RL J. Immunol. 146:4031-4040(1991).
 RN [7]
 RP SEQUENCE FROM N.A.
 RX STRAIN=BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE=Spleen;
 RA Ma R.Z., Teuscher C.;
 RT Submitted (May-1998) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE OF 24-42.
 RX MEDLINE=88154745; PubMed=3279154;
 RA Wolpe S.D., Davatellis G., Sherry B., Beutler B., Hesse D.G.,
 RA Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cerami A.;
 RT "Macrophages secrete a novel heparin-binding protein with
 RT inflammatory and neutrophil chemokinetic properties";
 RL J. Exp. Med. 167:570-581(1988).
 CC [1-] FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
 CC PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
 CC BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
 CC NEUTROPHILS.
 CC [1-] SUBCELLULAR LOCATION: Secreted.
 CC [1-] TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
 CC [1-] SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL; M23447; AAA40146.1; -

DR EMBL; X12531; CAA31047.1; -
 DR EMBL; X53372; CAA37452.1; -
 DR EMBL; J04491; AAA40304.1; -
 DR EMBL; M73061; AAA39707.1; -
 DR EMBL; AF065939; AAC17506.1; -
 DR EMBL; AF065940; AAC17507.1; -
 DR EMBL; AF065941; AAC17508.1; -
 DR EMBL; AF065942; AAC17509.1; -
 DR EMBL; AF065943; AAC17510.1; -
 DR PIR; A27596; A27596.
 DR PIR; A30552; A30552.
 DR PIR; A32393; A32393.
 DR PIR; S04533; S04533.
 DR PIR; S11685; S11685.
 DR HSP; P12336; IHUM.
 DR MGI; MGI:98260; Scya3.
 DR InterPro: IPR000827; CC_chemokine_sml.
 DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 DR SMART: SM00199; SCV; 1.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 22 22 F -> L (IN REF. 3).
 FT CONFLICT 62 62 V -> A (IN REF. 3).
 SQ SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DEDD38 CRC64;
 Query Match 31.2%; Score 119; DB 1; Length 92;
 Best Local Similarity 34.8%; Pred. No. 3.2e-08;
 Matches 23; Conservative 18; Mismatches 23; Indels 2; Gaps 2;
 QY 2 PYGAMEDSVCCRDYVRYRLRVKHFYWTSCPRPGVVLTFTRKKEICADPRVYLK 61
 DB 25 PYGAD-TPTACCFYSYSR-KIPROFIVDYFETSSICSQPGVIFLTNRNQICADSKETWVQ 82
 QY 62 MILNKL 67
 DB 83 EYITDL 88
 RESULT 9
 SY12_MOUSE
 ID SY12_MOUSE STANDARD; PRT; 104 AA.
 AC Q62401; Q9QYD6;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A12 precursor (CCL12) (Monocyte chemotactic
 DE protein 5) (MCP-5) (MCP-1 related chemokine).
 GN SCYA12 OR MCP5.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97079149; PubMed=8920881;
 RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C.,
 RA Wershil B.K., Gutierrez-Ramos J.C.;
 RT "Distinct expression and function of the novel mouse chemokine
 RT monocyte chemotactic protein-5 in lung allergic inflammation";
 RL J. Exp. Med. 184:1939-1951(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97149438; PubMed=8996246;
 RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;
 RT "Murine monocyte chemoattractant protein (MCP)-5: a novel CC
 RT chemokine that is a structural and functional homologue of human
 RT MCP-1";
 RL J. Exp. Med. 185:99-109(1997).

RESULT 12


```

OX NCBI_TaxID=101116;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RC Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
RC Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
RL
RL -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC
CC -!- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC
CC -!- SUBCELLULAR LOCATION: Secreted.
CC
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL; U06434; AAA96497.1; -.
DR HSPB; P13236; 1HUM.
DR
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
DR Cytokine; Chemotaxis; Inflammatory response; Signal.
KW SIGNAL 1 23 BY SIMILARITY.
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A4.
FT DISULFID 34 56 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
SQ
SQ SEQUENCE 92 AA; 10234 MW; 60B451EEBC7103D CRC64;
Query Match 30.5%; Score 116.5; DB 1; Length 92;
Best Local Similarity 36.4%; Pred. No. 6.6e-08;
Matches 24; Conservative 12; Mismatches 29; Indels 1; Gaps 1;
QY 2 PYGANMEDSVCCRDYVRYRLPLRVVHFVWTSDCSPRGVVLITFRDKICADPRVPYLK 61
Db 25 PIGSDPPTS-CCFSYTSRKTHRFVMDYVETSLCSQPAVVLTKKGRQICADPSEPVN 83
QY 62 MILNKL 67
Db 84 EYVNDL 89
RESULT 14
SY14_HUMAN
ID SY14_HUMAN STANDARD; PRT; 93 AA.
AC Q16627; Q13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
DE (HCC-1/HCC-3) (NCC-2).
DE SCYA14 OR NCC2.
GN Homo sapiens (human).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
RC TISSUE=Bone marrow;
RX MEDLINE=96136773; PubMed=8551235;
RA Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
RA Kubiles M., Tomeczkowski J., Kirchhoff K., Raída M., Adermann K.,
RA Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
RA Baggiolini M., Forssmann W.-G.;
RT "HCC-1, a novel chemokine from human plasma.";
RN J. Exp. Med. 183:295-299(1996).
RN [2]
RN SEQUENCE FROM N.A.
RN

```



```
RC TISSUE=Liver;
RX MEDLINE=98263352; PubMed=9600961;
RA Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
RT Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
RA "HCC-2, a human chemokine: gene structure, expression pattern, and
RT biological activity.";
RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
CC -1- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
CC RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
CC INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
CC AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
CC LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
CC PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
CC ARE PRODUCED BY ALTERNATIVE SPLICING.
CC -1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
CC TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
CC MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; Z49270; CAA89264.1; -
DR EMBL; Z70292; CAA94307.1; -
DR EMBL; Z70293; CAA94309.1; -
DR EMBL; Z49269; CNA89263.1; -
DR EMBL; AF088219; AAC63329.1; -
DR EMBL; AF088219; AAF23982.1; -
DR HSSP; P13236; IHUM.
DR Genew; HGNC:10612; SCYA14.
DR MIM; 601392; -
DR InterPro; IPR000827; CC_chemkine.sm.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
DR Cytokine; Signal; Alternative splicing.
KW SIGNAL
FT CHAIN 1 19 SMALL INDUCIBLE CYTOKINE A14.
FT DISULFID 20 93 BY SIMILARITY.
FT DISULFID 35 59 BY SIMILARITY.
FT DISULFID 36 75 BY SIMILARITY.
FT VARSPLIC 27 27 R -> QTGGKPKVKVIQLKLVG (IN ISOFORM HCC-
FT 3).
SQ SEQUENCE 93 AA; 10678 MW; DDBB899DC9148836 CRC64;
Query Match 29.8%; Score 114; DB 1; Length 93;
Best Local Similarity 34.5%; Pred. No. 1.4e-07;
Matches 19; Conservative 11; Mismatches 21; Indels 4; Gaps 1;
QY 1 GPYGANNEDSVCCRDYRPLRVKVFYWTSDSPRGVLLTFRDKEICADP 55
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 28 GPY----HPSECCFTYTKIPRQIRIMDYETNSQCSKPGIVFTRKRGHSVCTNP 78
RESULT 15
SY17_HUMAN STANDARD; PRT; 94 AA.
ID SY17_HUMAN
```

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AC Q92583;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A17 precursor (CCL17) (Thymus and activation-
DE regulated chemokine) (CC chemokine TARC).
GN SCYA17 OR TARC OR A-152E5.3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 24-32.
RX MEDLINE=98180363; PubMed=9521068;
RX MEDLINE=96355526; PubMed=8702936;
RA Inai T., Yoshida T., Baba M., Nishimura M., Kakizaki M., Yoshie O.;
RT "Molecular cloning of a novel T cell-directed CC chemokine expressed
RT in thymus by signal sequence trap using Epstein-Barr virus vector.";
RL J. Biol. Chem. 271:21514-21521(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=99425270; PubMed=10493829;
RA Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,
RA Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,
RA Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,
RA Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;
RT "Genome duplications and other features in 12 Mb of DNA sequence from
RT human chromosome 16p and 16q.";
RL Genomics 60:295-308(1999).
RN [3]
RP RECEPTOR INTERACTION.
RX MEDLINE=98180363; PubMed=9521068;
RA Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G.,
RA Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
RA Napolitano M.;
RT "Identification of the CC chemokines TARC and macrophage inflammatory
RT protein-1 beta as novel functional ligands for the CCR8 receptor.";
RL Eur. J. Immunol. 28:582-588(1998).
CC -1- FUNCTION: CHEMOTACTIC FACTOR FOR T LYMPHOCYTES BUT NOT MONOCYTES
CC OR GRANULOCYTES. MAY PLAY A ROLE IN T CELL DEVELOPMENT IN THYMUS
CC AND IN TRAFFICKING AND ACTIVATION OF MATURE T CELLS. BINDS TO CCR4
CC AND CCR8.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THYMUS AND AT LOW
CC LEVELS IN THE LUNG, COLON AND SMALL INTESTINE.
CC -1- INDUCTION: BY PHYTOHEMAGGLUTININ (PHA) IN THE PERIPHERAL BLOOD
CC MONONUCLEAR CELLS AND BY CYTOKINES IN MONOCYTES.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
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CC -----
DR EMBL; D43767; BAA07824.1; -
DR EMBL; AC004382; AAC24308.1; -
DR HSSP; Q98157; IVMP.
DR Genew; HGNC:10615; SCYA17.
DR MIM; 601520; -
DR InterPro; IPR000827; CC_chemkine.sm.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 94 SMALL INDUCIBLE CYTOKINE A17.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
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SQ SEQUENCE 94 AA; 10507 MW; 7959C56BA8FDAF08 CRC64;
Query Match 29.7%; Score 113.5; DB 1; Length 94;
Best Local Similarity 35.6%; Pred. No. 1.6e-07;
Matches 21; Conservative 13; Mismatches 18; Indels 7; Gaps 1;
QY 12 CCRDYYRYRLPLRVVYKHFWYTSDCPRPGVVLLTFRDKEICADPR-----VPYLKMI 63
DB 33 CCLEYFKGAIPRLKLTWYQTSDCSRDAIVFVTVQGRAICSDPNPKRVKNVAVYQLSL 91

Search completed: July 28, 2003, 04:01:12
Job time : 3.62395 secs

Result No.	Score	Query		Length	DB	ID	Description
		Match					
1	259	67.8	81	11		Q9QZU1	Q9qzu1 rattus norv
2	259	67.8	92	11		Q912H5	Q91zh5 rattus norv
3	256	67.0	95	11		Q9QZU2	Q9qzu2 mus musculu
4	141	36.9	95	12		Q98158	Q98158 kaposi's sa
5	131	34.3	91	13		Q8Q557	Q8q557 gallus gall
6	130.5	34.2	91	11		Q912L0	Q912l0 sigmodon hi
7	130	34.0	89	13		Q91B80	Q91be0 gallus gall
8	127	33.2	92	11		Q91265	Q91265 sigmodon hi
9	126.5	33.1	90	13		Q9PWA6	Q9pwa6 gallus gall
10	125.5	32.9	90	13		Q910C9	Q910c9 gallus gall
11	114.5	30.0	93	6		Q8SQA6	Q8sqag bos taurus
12	114	29.8	92	6		Q8SQ40	Q8sq40 felis silve
13	114	29.8	93	11		Q9WZ76	Q9wz76 mus musculu
14	114	28.8	131	11		Q9R043	Q9r043 mus musculu
15	110	28.8	93	4		Q96168	Q96168 homo sapien
16	107.5	28.1	91	11		Q912L1	Q912l1 sigmodon hi

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Db 74 KKILHKL 81
RESULT 2
Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMELrel. 19, Created)
DT 01-DEC-2001 (TREMELrel. 19, Last sequence update)
DT 01-DEC-2002 (TREMELrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia C.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 67.0%; Score 259; DB 11; Length 92;
Best Local Similarity 63.2%; Pred. No. 1.3e-26;
Matches 43; Conservative 16; Mismatches 9; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRVYRRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVYL 60
Db 25 GPGANVEDSICCDYIRHPLPRFVKFEYWTSCRKPGVVLITIKNRDICALDPRMLV 84
QY 61 KMILNKL 68
Db 85 KKILHKL 92

RESULT 3
Q9QZU2 PRELIMINARY; PRT; 92 AA.
AC Q9QZU2;
DT 01-MAY-2000 (TREMELrel. 13, Created)
DT 01-MAY-2000 (TREMELrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMELrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163476; RAD55763.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352B63 CRC64;

Query Match 67.0%; Score 256; DB 11; Length 92;
Best Local Similarity 61.8%; Pred. No. 3.2e-26;
Matches 42; Conservative 17; Mismatches 9; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRVYRRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVYL 60
Db 25 GPGANVEDSICCDYIRHPLPRFVKFEYWTSCRKPGVVLITVKNRDICALDPRQVWV 84
QY 61 KMILNKL 68
Db 85 KKILHKL 92

RESULT 4
Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; 012569;
DT 01-FEB-1997 (TREMELrel. 02, Created)
DT 01-JUL-1997 (TREMELrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMELrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [3]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=97296220; PubMed=9151804;
RA Neipel F., Albrecht J.C., Fleckenstein B.;
RT "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
RT human herpesvirus 8: determinants of its pathogenicity?";
RL J. Virol. 71:4187-4192(1997).
RN [7]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A.
RA Ren S., Lin S.-F., Miller G.;
RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U75698; AAC57095.1; -
DR EMBL; U74585; AAB61704.1; -
DR EMBL; U93872; AAB62671.1; -
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DR EMBL; U71366; AAC34943.1; -.
DR EMBL; U50138; AAD11536.1; -.
DR HSSP; Q98157; IVP.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Hypothetical protein.
SQ SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;

Query Match          36.9%; Score 141; DB 12; Length 95;
Best Local Similarity 39.3%; Pred. No. 5.5e-11;
Matches 22; Conservative 19; Mismatches 13; Indels 0; Gaps 0;

QY 12 CCRDYVRLRVLRVVKHFEYWTSDCPRGVLLTFRDKEICADPRVPYLKMLNKL 67
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 36 CCYGFQHPVPVQILKENYPTSPACPKPGVILLTKRGQICADPSKNVRLMQEL 91

RESULT 5
Q8QG57
ID Q8QG57 PRELIMINARY; PRT; 91 AA.
DT 01-JUN-2002 (TremBLrel. 21, Created)
DT 01-JUN-2002 (TremBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TremBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21655115; PubMed=11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
   chicken CC chemokines.";
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match          34.3%; Score 131; DB 13; Length 91;
Best Local Similarity 36.4%; Pred. No. 1.1e-09;
Matches 24; Conservative 18; Mismatches 22; Indels 2; Gaps 1;

QY 2 PYGNMDSVCCRDYVRLRVLRVVKHFEYWTSDCPRGVLLTFRDKEICADPRVPYLK 61
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 25 PFGA--DTVCCFNYSVRKLPQNHVKDYFTSSKCPQAADVFTTRKGRQVCANPDARWK 82

QY 62 MILNKL 67
   :| |
Db 83 EYINFL 88

Query Match          34.0%; Score 130; DB 13; Length 89;
Best Local Similarity 27.9%; Pred. No. 1.5e-09;
Matches 19; Conservative 23; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGNMDSVCCRDYVRLRVLRVVKHFEYWTSDCPRGVLLTFRDKEICADPRVPYLK 61
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 23 PVGPDV--PTCTTYITHKIPNLRIQRIHYSTSCSKPAIFITKREVCANPSDPWVQ 80

QY 62 MILNKL 69
   :| |
Db 81 RYLQSVKR 88

RESULT 8
Q91Z65
ID Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65;
DT 01-DEC-2001 (TremBLrel. 19, Created)
DT 01-DEC-2001 (TremBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TremBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIPI ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
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DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match          34.2%; Score 130.5; DB 11; Length 92;
Best Local Similarity 40.9%; Pred. No. 1.3e-09;
Matches 27; Conservative 10; Mismatches 28; Indels 1; Gaps 1;

QY 2 PYGNMDSVCCRDYVRLRVLRVVKHFEYWTSDCPRGVLLTFRDKEICADPRVPYLK 61
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 25 PRGSDPPTS-CGFSYASRKLPRNFVTDYETSSLSKPAVVFVLTTRKREVCADPSQPVWN 83

QY 62 MILNKL 67
   :| |
Db 84 EYVNDL 89

RESULT 7
Q918E0
ID Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0;
DT 01-OCT-2000 (TremBLrel. 15, Created)
DT 01-OCT-2000 (TremBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TremBLrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20170941; PubMed=10704244;
RA Sick C., Schneider K., Staeheli P., Weining K.C.;
RT "Novel chicken CXCL and CC chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSSP; P13236; IHUM.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Signal.
FT SIGNAL.
FT CHAIN.
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match          34.0%; Score 130; DB 13; Length 89;
Best Local Similarity 27.9%; Pred. No. 1.5e-09;
Matches 19; Conservative 23; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGNMDSVCCRDYVRLRVLRVVKHFEYWTSDCPRGVLLTFRDKEICADPRVPYLK 61
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 23 PVGPDV--PTCTTYITHKIPNLRIQRIHYSTSCSKPAIFITKREVCANPSDPWVQ 80

QY 62 MILNKL 69
   :| |
Db 81 RYLQSVKR 88

RESULT 8
Q91Z65
ID Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65;
DT 01-DEC-2001 (TremBLrel. 19, Created)
DT 01-DEC-2001 (TremBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TremBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIPI ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
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Q8SQ40
ID Q8SQ40 PRELIMINARY; PRT; 92 AA.
AC Q8SQ40;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE RANTES protein.
GN RANTES.
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
OX NCBI_TaxID=9685;
RN [1]
RP SEQUENCE FROM N.A.
RA Kimura T., Kano R., Hasegawa A.;
RL "molecular cloning of feline RANTES gene."
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB083479; BAB8940.1; -
SQ SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
Query Match 29.8%; Score 114; DB 6; Length 92;
Best Local Similarity 31.7%; Pred. No. 2e-07;
Matches 19; Conservative 19; Mismatches 20; Indels 2; Gaps 1;
QY 2 PYGMNEDSVCCRDYVYRLPLRVKHFYVTSDCPRPGVLLTFDKKEICADPRVPYLYK 61
DB 25 PYAS--DTTPCCFAVLSHPLPLTHLQYFYVTSKCSMPAVVFTRRKQVCANPQKKWYR 82
RESULT 13
ID Q9WUZ6 PRELIMINARY; PRT; 93 AA.
AC Q9WUZ6;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Thymus and activation-regulated chemokine precursor (Small inducible cytokine subfamily A17).
GN TARC OR ABCD-2 OR SCYA17.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Lieberam I., Forster I.;
RL "The murine b-chemokine TARC is expressed by subsets of dendritic cells and attracts primed CD4+ T cells."
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RX MEDLINE=99438049; PubMed=10508268;
RA Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F., Rolink A.G.;
RL "Three chemokines with potential functions in T lymphocyte-independent and -dependent B lymphocyte stimulation."
RL Eur. J. Immunol. 29:2934-2947(1999).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=PANCREAS;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Kuehl P., Lewis S., Matsuo Y., Nikaido I., Resole G., Quackenbush J., Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustinich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S., Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection."
RL Nature 409:685-690(2001).
RN [4]
RP SEQUENCE FROM N.A.
RC TISSUE=THYMUS GLAND;
RA Strausberg R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ242587; CAB45256.1; -
DR EMBL; AF125572; AAD56602.1; -
DR EMBL; AF125571; AAD56601.1; -
DR EMBL; AK007663; BAB25171.1; -
DR EMBL; BC028505; AAH28505.1; -
DR HSSP; Q98157; 1CM9.
DR MGD; MGI:1329039; Scyal7.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT SIGNAL 1 20
FT CHAIN 21 93
FT THYMUS AND ACTIVATION-REGULATED
FT CHEMOKINE.
SQ SEQUENCE 93 AA; 10466 MW; 6EFCDA4FDEBEECCCE CRC64;
Query Match 29.8%; Score 114; DB 11; Length 93;
Best Local Similarity 42.0%; Pred. No. 2e-07;
Matches 21; Conservative 10; Mismatches 19; Indels 0; Gaps 0;
QY 12 CCRDYVYRLPLRVKHFYVTSDCPRPGVLLTFDKKEICADPRVPYLYK 61
DB 33 CCLDFKGAIPKIRKLVSWKTSVECSRDAIVFLTVGKLCADPKDKHKV 82
RESULT 14
ID Q9R043 PRELIMINARY; PRT; 131 AA.
AC Q9R043;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE CC chemokine ABCD-2.
GN SCYA17 OR ABCD-2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RX MEDLINE=99438049; PubMed=10508268;
RA Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F., Rolink A.G.;
RL "Three chemokines with potential functions in T lymphocyte-independent and -dependent B lymphocyte stimulation."
RL Eur. J. Immunol. 29:2934-2947(1999).
DR EMBL; AF125570; AAD56600.1; -
DR HSSP; Q98157; 1CM9.
DR MGD; MGI:1329039; Scyal7.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ SEQUENCE 131 AA; 15016 MW; 9515123376912A7E CRC64;

Query Match 29.8%; Score 114; DB 11; Length 131;
Best Local Similarity 42.0%; Pred. No. 2.8e-07;
Matches 21; Conservative 10; Mismatches 19; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVKKHYWTSDCPGCVVLLTFRDKEICADPRVPYLK 61
DB 71 CCLDYFKGAIPTRKLVSWYKTSVECSRDAIVFLTVQGKLIACADPKRHKV 120

RESULT 15

Q96I68 PRELIMINARY; PRT; 93 AA.
AC Q96I68;
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Similar to small inducible cytokine A3 (homologous to mouse
DE Mip-la).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=B-CELL;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC007783; AAH07783.1; -;
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN1.
SQ SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;

Query Match 28.8%; Score 110; DB 4; Length 93;
Best Local Similarity 29.3%; Pred. No. 6.8e-07;
Matches 17; Conservative 16; Mismatches 25; Indels 0; Gaps 0;

QY 10 SVCCRDYVRYRLPLRVVKKHYWTSDCPGCVVLLTFRDKEICADPRVPYLKMLNKL 67
DB 32 TACCFYSYRSRQIPQNFADIFETSSQCSKPSVIFLTKRGRQVCADPSEEWQKIVSDL 89

Search completed: July 28, 2003, 04:02:52
Job time : 12.7563 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

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Scoring table: BLOSUM62

Gapop 10.0 , Gapert 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	379	100.0	69	AAW20062	Human macrophage d
2	379	100.0	69	AAW20062	Macrophage derived
3	379	100.0	69	AAW20062	Human macrophage-d
4	362	95.5	69	AAW20062	Human chemokine MD
5	362	95.5	69	AAW20062	Human MDC protein.
6	362	95.5	70	AAW20060	Human macrophage d
7	362	95.5	70	AAW20060	Macrophage derived
8	362	95.5	70	AAW20060	Human macrophage-d
9	362	95.5	86	AAW59432	Human chemokine pr
10	362	95.5	93	AAW20058	Macrophage derived

11	362	95.5	93	AAW62783	Amino acid sequenc
12	362	95.5	93	AAW59433	Human chemokine pr
13	362	95.5	93	AAW40811	Macrophage-derived
14	362	95.5	93	AAW26175	Macrophage-derived
15	362	95.5	93	AAW24414	Human macrophage d
16	362	95.5	93	AAW05871	Human macrophage-d
17	362	95.5	93	AAW06829	Macrophage derived
18	362	95.5	93	AAW07500	A human monokine d
19	362	95.5	93	AAW07500	Human macrophage-d
20	362	95.5	154	AAW05878	Yeast pre-pro-alpha
21	362	95.5	172	AAW29895	Human MDC and huma
22	362	95.5	334	AAW29904	Human MDC and HIV-
23	362	95.5	587	AAW29900	Cytokine beta-13 s
24	357	94.2	93	AAW07604	Human chemokine be
25	357	94.2	93	AAW57881	Amino acid sequenc
26	357	94.2	93	AAW68352	Stem cell mobilisi
27	356	93.9	68	AAW17668	Human macrophage-d
28	353	93.1	93	AAW05879	Macaque macrophage
29	352	92.9	93	AAW05880	Human macrophage d
30	350	92.3	69	AAW20061	Macrophage derived
31	350	92.3	69	AAW24415	Human macrophage-d
32	350	92.3	69	AAW05874	Human macrophage d
33	322	85.0	93	AAW20059	Macrophage derived
34	322	85.0	93	AAW24417	Human macrophage-d
35	322	85.0	93	AAW05872	Macrophage derived
36	266	70.2	473	AAW61797	Chimeric chemokine
37	264	69.7	68	AAW61808	Murine MDC mature
38	264	69.7	68	AAW78392	Mouse chemokine m
39	264	69.7	68	AAW68355	Murine chemokine m
40	264	69.7	92	AAW59434	Mouse chemokine pr
41	264	69.7	92	AAW05876	Mouse macrophage-d
42	254	67.0	81	AAW05877	Rat macrophage-der
43	210.5	55.5	67	AAW78396	Human/mouse hybrid
44	210.5	55.5	67	AAW68359	Chimeric chemokine
45	189	49.9	37	ABB39053	Peptide #6359 enco

ALIGNMENTS

RESULT 1
AAW20062
ID AAW20062 standard; Protein; 69 AA.
XX
AC AAW20062;
XX
DT 11-SEP-1997 (first entry)
XX
DE Human macrophage derived chemokine analogue.
XX
DE MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX
OS Synthetic.
XX
PN W09640923-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96WO-US10114.
XX
PR 16-NOV-1995; 95US-0558658.
PR 07-JUN-1995; 95US-0479620.
XX
(ICOS-) ICOS CORP.
PI Godiska R, Gray PW;
XX
DR WPI; 1997-052324/05.
XX
PT Macrophage derived chemokine (MDC) and analogues - used in the
treatment of inflammatory diseases, MDC antibodies used to treat

PT Crohn's disease, rheumatoid arthritis, etc.
 PS Claim 25; Page 84; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 69 AA;
 Query Match 100.0%; Score 379; DB 18; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVYLLTFRDKEICADPRVPWV 60
 DB 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVYLLTFRDKEICADPRVPWV 60
 QY 61 KMLNKLQSQ 69
 DB 61 KMLNKLQSQ 69
 RESULT 2
 AAY24416
 ID AAY24416 standard; peptide; 69 AA.
 XX
 AC AAY24416;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Macrophage derived chemokine analogue MDC-eyfy.
 XX
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN US5932703-A.
 XX
 PD 03-AUG-1999.
 XX
 PF 07-JUN-1996; 96US-0660542.
 XX
 PR 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1999-443621/37.
 XX
 PT Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX
 PS Example 11; Column 61; 43pp; English.
 XX
 CC The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. MDC analogues are capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogues may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX
 SQ Sequence 69 AA;
 Query Match 100.0%; Score 379; DB 20; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVYLLTFRDKEICADPRVPWV 60
 DB 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVYLLTFRDKEICADPRVPWV 60
 QY 61 KMLNKLQSQ 69
 DB 61 KMLNKLQSQ 69
 RESULT 3
 AAY05875
 ID AAY05875 standard; Protein; 69 AA.
 XX
 AC AAY05875;
 XX
 DT 02-AUG-1999 (first entry)
 XX
 DE Human macrophage-derived C-C chemokine MDC analogue MDC-eyfy.
 XX
 KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine; RANTES.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9915666-A2.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 28..31
 FT /note= "His-Phe-Tyr-Trp in native MDC"
 XX
 PD 01-APR-1999.
 XX
 PF 28-SEP-1998; 98WO-US20270.
 XX
 PR 28-APR-1998; 98US-0067447.
 PR 26-SEP-1997; 97US-0939107.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 XX
 DR WPI; 1999-254715/21.
 XX
 PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 PS Example 11; Page 13; 147pp; English.
 XX
 CC The present sequence represents synthetic analogue MDC-eyfy of the
 CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
 CC MDC-eyfy consists of amino acid residues 1-69 of the MDC mature
 CC polypeptide, with residues 28-31 (His-Phe-Tyr-Trp) replaced with the
 CC sequence Glu-Tyr-Phe-Tyr, derived from the amino acid sequence of
 CC the chemokine RANTES. The analogue is expected to be an antagonist
 CC of MDC inhibiting activity by competitively binding to the
 CC receptor that recognises MDC or by forming inactive heterodimers
 CC with MDC. Alternatively, MDC-eyfy may confer some of the activities
 CC RANTES, such as chemotaxis of T lymphocytes, monocytes or

CC eosinophils. MDC antagonists are used in claimed methods for the
 CC preparation of medicaments for the suppression of the proliferation
 CC of a mammalian immunodeficiency virus, for inhibiting platelet
 CC aggregation in a mammal, for the treatment or palliation of lupus
 CC erythematosus in a mammal, for inhibiting MDC-induced activation,
 CC chemotaxis or proliferation of cells that express CCR4, for
 CC inhibiting or palliating an allergic reaction in a mammal, and for
 CC treating asthma.

XX Sequence 69 AA;
 SQ

Query Match 100.0%; Score 379; DB 20; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 4
 AAO20022
 ID AAO20022 standard; protein; 69 AA.
 XX
 AC AAO20022;
 XX
 DT 11-JUN-2002 (first entry)
 XX
 DE Human chemokine MDC protein.
 XX
 KW Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
 KW antiarteriosclerotic; dermatological; antinflammatory; antiallergic;
 KW immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
 KW AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
 KW atheroma; atherosclerosis; organ transplant rejection; MDC.
 OS Homo sapiens.
 XX
 PN WO200204015-A1.
 XX
 PD 17-JAN-2002.
 XX
 PF 12-JUL-2001; 2001WO-US21933.
 XX
 PR 12-JUL-2000; 2000US-217683P.
 XX
 PA (GRYP-) GRYPHON SCI.
 XX
 PI Kochendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;
 XX
 DR WPI; 2002-268857/31.
 XX
 PT New polymer-modified bioactive synthetic chemokines useful in the
 PT treatment of various diseases or disorders e.g. asthma
 XX
 PS Disclosure; Fig 10C; 176pp; English.
 XX
 CC The invention relates to polymer-modified bioactive synthetic chemokines
 CC and to methods for their production and use. The compounds and methods of
 CC the backbone of the invention are useful in the analysis and treatment of
 CC various diseases states e.g. HIV and AIDS related disorders, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
 CC transplant rejection, and rheumatoid arthritis. This sequence represents
 CC the human chemokine MDC protein of the invention.

XX Sequence 69 AA;
 SQ

Query Match 95.5%; Score 362; DB 23; Length 69;
 Best Local Similarity 94.2%; Pred. No. 1.1e-39;
 Matches 69; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 5
 AAO14155
 ID AAO14155 standard; protein; 69 AA.
 XX
 AC AAO14155;
 XX
 DT 25-APR-2002 (first entry)
 XX
 DE Human MDC protein.
 XX
 KW Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
 KW asthma; allergic rhinitis; atopic dermatitis; atheroma; antinflammatory;
 KW antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
 KW antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
 KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.
 OS Homo sapiens.
 XX
 PN WO200204499-A1.
 XX
 PD 17-JAN-2002.
 XX
 PF 12-JUL-2001; 2001WO-US21934.
 XX
 PR 12-JUL-2000; 2000US-217683P.
 XX
 PA (GRYP-) GRYPHON SCI.
 XX
 PI Offord R, Gaertner H, Hartley O;
 XX
 DR WPI; 2002-171703/22.
 XX
 PT Chemokine receptor modulator useful for treating e.g. asthma, allergic
 PT rhinitis comprises a chemically modified carboxyl-terminus and/or amino
 PT terminus analogs
 XX
 PS Example 3; Fig 2; 86pp; English.
 XX
 CC The present invention relates to chemokine receptor modulators, which
 CC comprise a chemokine polypeptide chain modified at N-terminus with an
 CC aliphatic chain and at least one amino acid derivatives and/or modified
 CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
 CC can be used to treat diseases such as HIV infection, AIDS, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
 CC transplant rejection and rheumatoid arthritis. The present sequence is
 CC the human MDC protein.

XX Sequence 69 AA;
 SQ

Query Match 95.5%; Score 362; DB 23; Length 69;
 Best Local Similarity 94.2%; Pred. No. 1.1e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 6

AAW20060
ID AAW20060 standard; Protein; 70 AA.

XX
AC AAW20060;

XX
DT 11-SEP-1997 (first entry)

XX
DE Human macrophage derived chemokine analogue.

XX
KW MDC; macrophage derived chemokine; C-C; Cys-Cys: Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.

XX
OS Synthetic.

XX
PN WO9640923-A1.

XX
PD 19-DEC-1996.

XX
PF 07-JUN-1996; 96WO-US10114.

XX
PR 16-NOV-1995; 95US-0558658.

XX
PR 07-JUN-1995; 95US-0479620.

XX
PA (ICOS-) ICOS CORP.

XX
PI Godiska R, Gray PW;

XX
WPI; 1997-052324/05.

XX
PT Macrophage derived chemokine (MDC) and analogues - used in the
PT treatment of inflammatory diseases, MDC antibodies used to treat
PT Crohn's disease, rheumatoid arthritis, etc.

XX
PS Claim 25; Page 83; 106pp; English.

XX
CC A new macrophage derived chemokine, MDC, a member of the C-C
CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
CC analogues may be used in the treatment of inflammatory diseases
CC especially diseases characterised by monocyte chemotaxis towards a
CC site of inflammation. MDC and its analogues also induce fibroblast
CC proliferation having a positive effect in wound healing and
CC angiogenesis. They may prove to be clinically important in the
CC treatment of tumours, by directly or indirectly inhibiting tumour
CC formation. Antibodies directed against MDC and its analogues may be
CC used in the treatment of Crohn's disease, rheumatoid arthritis and
CC atherosclerosis. Probes and/or primers for the identification of MDC
CC encoding sequences can be derived from MDC encoding sequences.

XX
SQ Sequence 70 AA;

Query Match 95.5%; Score 362; DB 18; Length 70;

Best Local Similarity 94.2%; Pred. No. 1.1e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1.GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKCAIDPRVPWV 60

DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKCAIDPRVPWV 61

QY 61 KMILNKLSQ 69

DB 62 KMILNKLSQ 70

RESULT 7

AAI24413

ID AAI24413 standard; peptide; 70 AA.

XX
AC AAI24413;

XX
DT 24-SEP-1999 (first entry)

XX

DE

XX Macrophage derived chemokine analogue MDC (n+1).

XX
KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
KW inflammation; immune response; inflammatory disorder; Crohn's disease;
KW atherosclerosis; arthritis; pulmonary fibrosis.

XX
OS Homo sapiens.

XX
OS Synthetic.

XX
PN US5932703-A.

XX
PD 03-AUG-1999.

XX
PF 07-JUN-1996; 96US-0660542.

XX
PR 07-JUN-1996; 96US-0660542.

XX
PR 07-JUN-1995; 95US-0479620.

XX
PR 16-NOV-1995; 95US-0558658.

XX
PA (ICOS-) ICOS CORP.

XX
PI Godiska R, Gray PW;

XX
WPI; 1999-443621/37.

XX
PT Macrophage derived chemokine analogues useful for inhibiting
PT macrophage derived chemokine-induced chemotaxis

XX
PS Claim 1; Column 59; 43pp; English.

XX
CC The present sequence represents a macrophage derived chemokine (MDC)
CC analogue. The MDC analogue is capable of inhibiting MDC induced
CC chemotaxis. Therefore, the MDC analogue may be used to modulate
CC inflammatory and immune responses allowing for the treatment of
CC disorders associated with excessive inflammation or overactive immune
CC responses. Inflammatory disorders which may be treated in this way
CC include Crohn's disease (manifested by chronic inflammation of the
CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.

XX
SQ Sequence 70 AA;

Query Match 95.5%; Score 362; DB 20; Length 70;

Best Local Similarity 94.2%; Pred. No. 1.1e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKCAIDPRVPWV 60

DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKCAIDPRVPWV 61

QY 61 KMILNKLSQ 69

DB 62 KMILNKLSQ 70

RESULT 8

AAI05873

ID AAI05873 standard; Protein; 70 AA.

XX
AC AAI05873;

XX
DT 02-AUG-1999 (first entry)

XX
DE Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).

XX
KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
KW antagonist; chemoattractant; antiproliferative; dermatological;
KW immunosuppressive; antinflammatory; antitumor; antitumor;
KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
KW vaccine.

XX
OS Homo sapiens.

XX
OS Synthetic.

XX

XX (ICOS-) ICOS CORP.
 PA
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 CC
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 XX Sequence 93 AA;
 SQ
 Query Match 95.5%; Score 362; DB 18; Length 93;
 Best Local Similarity 94.2%; Pred. No. 1.5e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX
 AC AAW62783;
 XX
 DT 24-SEP-1998 (first entry)
 XX
 DE Amino acid sequence of human STCP-1.
 XX
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX
 OS Homo sapiens.
 XX
 PN WO9824907-A1.
 XX
 PD 11-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US21552.
 XX
 PR 03-DEC-1996; 96US-0760127.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Andrew DP, Chang M;
 XX
 DR WPI: 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX

Human STCP-1 polypeptides with chemokine activity - useful e.g. to treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
 Claim 1; Fig 2A-F; 96pp; English.
 The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other conditions associated with viral/bacterial pathogens infecting T-cells, macrophages or other immune system cells. They can be included (optionally chemically modified) with a pharmaceutically acceptable carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to alleviate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The polypeptides are also useful to prepare antibodies or hybridomas. The nucleic acids are useful to produce hybridisation probes to test for STCP-1 DNA/RNA in mammalian samples.

Query Match 95.5%; Score 362; DB 19; Length 93;
 Best Local Similarity 94.2%; Pred. No. 1.5e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 XX
 AC AAW59433;
 XX
 DT 27-AUG-1998 (first entry)
 XX
 DE Human chemokine protein 331D5.
 XX
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24 /label= signal
 FT Protein 25..93 /label= 331D5
 FT /note= "chemokine protein"
 XX
 PN WO9811226-A2.
 XX
 PD 19-MAR-1998.
 XX
 PF 09-SEP-1997; 97WO-US15315.
 XX
 PR 10-SEP-1996; 96US-0025724.
 XX
 PA (SCHE) SCHERING CORP.
 XX
 PI Gorman DM, Hedrick JA, Zlotnik A;
 XX
 DR WPI: 1998-207387/18.
 DR N-PSDB; AAV34997.

XX Mammalian CC and CXK chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions
XX
XX Claim 1; Page 78; 82pp; English.
XX
XX This sequence represents a novel human chemokine protein, 331D5.
CC Nucleic acid sequences encoding the chemokines can be used for detection,
CC in e.g. forensic techniques. Antibodies and other binding agents may be
CC used in diagnostics. The chemokines themselves are useful for treatment
CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
CC regeneration, degeneration or atrophy may be treated by the inventive
CC compositions.

XX
XX SQ Sequence 93 AA;

Query Match 95.5%; Score 362; DB 19; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.5e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPYGANMEDSVCCRYYRYRLPLRVKHFFYVTSDCRPGVLLTFRDKKEICADPRVPWV 60
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 25 GPYGANMEDSVCCRYYRYRLPLRVKHFFYVTSDCRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KMIINKLSQ 69
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 85 KMIINKLSQ 93

RESULT 13
AAW40811
ID AAW40811 standard; Protein; 93 AA.
AC XX
AC AAW40811;
XX
DT 01-APR-1998 (first entry)
XX
DE Macrophage-derived chemokine.
XX
KW Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
KW arthritis; inflammatory disorder; cancer; Crohn's disease;
KW atherosclerosis.
XX
OS Homo sapiens.
XX
Key Location/Qualifiers
FH Peptide 1..24
FT /note= "leader peptide"
FT Protein 25..93
FT /note= "mature protein"
XX
US5688927-A.
PN
XX
PD 18-NOV-1997.
XX
XX 07-JUN-1995; 95US-0480449.
XX
XX 07-JUN-1995; 95US-0480449.
XX
XX (ICOS-) ICOS CORP.
PA
XX Godiska R, Gray PW;
PI
XX WPI; 1998-008038/01.
DR N-PSDB; AAT92233.
XX
XX Antibodies specific for macrophage-derived chemokine - useful for
PT purifying or detecting the chemokine or modulating its activity
XX
PS Claim 3; Column 21-24; 22pp; English.
XX
CC This sequence represents the macrophage-derived chemokine (MDC). This
CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting
CC endogenous MDC in a host, and for modulating binding of MDC to its
CC receptors. The DNA encoding this sequence can be used for identifying and
CC isolating non-human MDC homologues. The MDC protein is potentially useful
CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX SQ Sequence 93 AA; Query Match 95.5%; Score 362; DB 19; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.5e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANNEDSVCCRDYVRYELPLRVVKKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
||||| ||||||| ||||||| ||||||| : ||||||| ||||||| ||||||| |||||||
Db 25 GPYGANNEDSVCCRDYVRYELPLRVVKHFFYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

QY 61 KMIILNKLSQ 69
||||| |||||||
Db 85 KMIILNKLSQ 93

RESULT 14
AAY26175
ID AAY26175 standard; Protein; 93 AA.
XX AC AAY26175;
XX XX
XX XX
XX XX
XX XX
XX XX
XX XX
XX KW Macrophage-derived chemokine.
XX KW Macrophage-derived chemokine; MDC; vaccine; Immune response; antigen;
XX KW humoral response; cell-mediated response; PCR; immunostimulatory;
XX KW expression plasmid vector.
XX OS Homo sapiens.
XX FH
XX FH Key Location/Qualifiers
XX FT Peptide 1..24
XX FT Protein /note= "signal peptide"
XX FT Protein 25..93
XX FT Protein /note= "mature macrophage-derived chemokine"
XX PN WO9929728-A1.
XX PD 17-JUN-1999.
XX XX
XX XX
XX XX 11-DEC-1998; 98WO-US26291.
XX XX 11-DEC-1997; 97US-0069281.
XX XX
XX XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
XX XX Devico AL, Gallo RC, Garzino-Demo A;
XX XX WPI; 1999-385578/32.
XX XX N-PSDB; AAX80630.
XX XX
XX XX Methods of enhancing vaccine efficacy
XX XX
XX XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.

CC The present sequence is macrophage-derived chemokine. This belongs to
CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
CC combining it with one or more chemokines to enhance the immune response
CC to an antigen. This can be humoral or cell-mediated immune response. The
CC purified chemokines, fragments, derivatives or analogues are
CC administered either concurrently with one or more purified antigens
CC against which an immune response is desired or within a time period
CC either before or after antigen administration. The chemokine gene is
CC isolated by PCR, and administered by constructing an expression plasmid
CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used
CC to treat microbial diseases especially HIV.

CC to treat microbial diseases especially HIV.

XX	Sequence	93 AA;
SQ		

Query Match 95.58; Score 362; DB 20; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.5e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKETCADPRVPWV 60

Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84

QY 61 KMILNKLSO 69

85 KMILNKLSQ 93

Search completed: July 28, 2003, 04:04:46
Job time : 15.0756 secs

Job time : 15.0756 secs

RESULT 15

AA24414
ID AA24414 standard: Protein: 93 AA.

AA
AC
AAAY24414;

DT 24-SEP-1999 (first entry)

Human macrophage derived chemokine.

Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 Inflammation; immune response; inflammatory disorder; Crohn's disease;
 atherosclerosis; arthritis; pulmonary fibrosis.

KW inflammation; immune response; inflammatory disorder; Crohn's disease;

KW atherosclerosis; arthritis; pulmonary fibrosis.
VV

OS Homo sapiens.

FH	Key	Location/Qualifiers
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24	24	24

FT /label= signal

FT	Protein	25..93
1	Protein	25..93

PN US5932703-A.

PD 03-AUG-1999.

07-JUN-1996: 96US-0660542.

07-JUN-1996: 96US-0660542

PR 07-JUN-1995: 95US-0479620.

PR 16-NOV-1995; 95US-0558658.

PA (ICOS-) ICOS CORP.

PI Godiska R. Grav PW:

WPY: 1999-443621/37

DR WFL, 1939-443021/
DR N-PSDB: AAX90162.

XX Macrophage derived chemokine analogues useful for inhibiting

PT macrophage derived chemokine-induced chemotaxis

XX
PS
Claim 2: Column 41-43: 43pp: English-

The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human MDC.

AA	Sequence	93	AA:
SO			

2

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 ; Search time 5.79832 Seconds
(without alignments)
350.133 Million cell updates/sec

Title: US-09-509-165A-32
Perfect score: 379
Sequence: 1 GPYANMEDSVCCRDYVRYR.....EICADPRVFWVKMILKLSQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues
Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2.6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2.6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2.6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2.6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2.6/ptodata/1/iaa/PCUS_COMB.pep.*
6: /cgn2.6/ptodata/1/iaa/backfiles1.pep.*

pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	379	100.0	69	2	US-08-660-542-32
2	362	95.5	70	2	US-08-660-542-30
3	362	95.5	93	1	US-08-480-449-2
4	362	95.5	93	1	US-08-660-542-2
5	362	95.5	93	4	US-09-232-878-6
6	362	95.5	93	4	US-08-479-603-2
7	362	95.5	93	5	PCR-US95-07294-2
8	350	92.3	69	2	US-08-660-542-31
9	322	85.0	93	2	US-08-660-542-25
10	156	41.2	95	4	US-09-230-637-26
11	154	40.6	68	4	US-09-141-833-5
12	153	40.4	89	1	US-08-208-339A-4
13	133	40.4	89	3	US-08-722-719-6
14	152	40.1	68	2	US-08-936-387-17
15	151	39.8	70	4	US-09-334-951-65
16	151	39.8	89	4	US-09-334-951-6
17	149	39.3	78	1	US-08-375-346A-6
18	149	39.3	78	2	US-08-467-123B-6
19	148	39.1	67	4	US-09-141-833-2
20	148	39.1	68	2	US-08-936-387-1
21	148	39.1	68	2	US-08-615-232A-11
22	148	39.1	68	3	US-08-470-323-11
23	148	39.1	68	4	US-08-836-922-1
24	148	39.1	68	4	US-09-141-833-1
25	148	39.1	69	4	US-08-836-922-2
26	148	39.1	69	4	US-08-836-922-3
27	148	39.1	69	4	US-08-836-922-4

28	148	39.1	73	2	US-08-936-387-13	Sequence 13, Appl
29	148	39.1	76	4	US-08-836-922-20	Sequence 20, Appl
30	148	39.1	90	4	US-09-230-637-40	Sequence 40, Appl
31	148	39.1	91	1	US-08-347-492B-12	Sequence 12, Appl
32	148	39.1	91	1	US-08-375-348A-5	Sequence 5, Appl
33	148	39.1	91	1	US-08-480-449-21	Sequence 21, Appl
34	148	39.1	91	2	US-08-633-682-3	Sequence 3, Appl
35	148	39.1	91	2	US-08-421-144A-8	Sequence 8, Appl
36	148	39.1	91	2	US-08-660-542-21	Sequence 21, Appl
37	148	39.1	91	2	US-08-798-143-12	Sequence 12, Appl
38	148	39.1	91	2	US-08-467-123B-5	Sequence 5, Appl
39	148	39.1	91	3	US-08-936-772-3	Sequence 3, Appl
40	148	39.1	91	4	US-08-836-922-14	Sequence 14, Appl
41	148	39.1	91	4	US-09-395-918-3	Sequence 3, Appl
42	148	39.1	91	4	US-08-679-493A-155	Sequence 155, App
43	148	39.1	91	4	US-08-479-603-21	Sequence 21, Appl
44	148	39.1	91	4	US-09-230-371A-25	Sequence 25, Appl
45	146	38.5	68	2	US-08-716-188-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-32
; Sequence 32, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE.
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-32

Query Match 100.0% Score 379; DB 2; Length 69;

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-Best Local Similarity 100.08; Pred. No. 3.4e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLTLFRDKKEICADPRVPWV 60
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Db 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLTLFRDKKEICADPRVPWV 60
   |||||||
QY 61 KMILNKLSQ 69
   |||||||
Db 61 KMILNKLSQ 69
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RESULT 2
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
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US-08-660-542-30

Query Match 95.5%; Score 362; DB 2; Length 70;
Best Local Similarity 94.2%; Pred. No. 6.2e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db 2 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLTLFRDKKEICADPRVPWV 61
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QY 61 KMILNKLSQ 69
   |||||||
Db 62 KMILNKLSQ 70
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-Query Match 95.5%; Score 362; DB 1; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLTLFRDKKEICADPRVPWV 60
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Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLTLFRDKKEICADPRVPWV 84
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QY 61 KMILNKLSQ 69
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Db 85 KMILNKLSQ 93
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RESULT 4
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-660-542-2

Query Match 95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 60
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 84
QY 61 KMILNLSQ 69
DB 85 KMILNLSQ 93

RESULT 5
US-09-232-878-6
Sequence 6, Application US/09232878
Patent No. 6245332
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: H. sapiens
US-09-232-878-6

Query Match 95.5%; Score 362; DB 4; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 60
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 84
QY 61 KMILNLSQ 69

DB 85 KMILNLSQ 93

RESULT 6
US-08-479-603-2
Sequence 2, Application US/08479603
Patent No. 6320023
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32780
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-603-2

Query Match 95.5%; Score 362; DB 4; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 60
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVVLLTFRDKEICADRPVW 84
QY 61 KMILNLSQ 69
DB 85 KMILNLSQ 93

RESULT 7
PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

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; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
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; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; PCT-US95-07294-2

Query Match          95.5%; Score 362; DB 5; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRVRLPLRVVKEYFYTSDSCPRGCVLLTFRDKICADPRVPWV 60
   |||||||
Db 25 GPGANNEDSVCCRDYVRVRLPLRVVKEYFYTSDSCPRGCVLLTFRDKICADPRVPWV 84

QY 61 KMILNKLSQ 69
   |||||||
Db 85 KMILNKLSQ 93

RESULT 8
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31

Query Match          92.3%; Score 350; DB 2; Length 69;
Best Local Similarity 91.3%; Pred. No. 2.4e-39;
Matches 63; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRVRLPLRVVKEYFYTSDSCPRGCVLLTFRDKICADPRVPWV 60
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Db 1 GPGANNEDSVCCRDYVRVRLPLRVVKEYFYTSDSCPRGCVLLTFRDKICADPRVPYL 60

QY 61 KMILNKLSQ 69
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Db 61 KMILNKLSQ 69

RESULT 9
US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
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; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
; TITLE OF INVENTION: Associated Herpesvirus
; FILE REFERENCE: 1107 78372
; CURRENT APPLICATION NUMBER: US/09/230,637
; CURRENT FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 60/022,591
; PRIOR FILING DATE: 1996-07-25
; PRIOR APPLICATION NUMBER: PCT US 97/12931
; PRIOR FILING DATE: 1997-07-24
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 95
; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
US-09-230-637-26

Query Match 41.2%; Score 156; DB 4; Length 95;
Best Local Similarity 42.9%; Pred. No. 1.9e-13;
Matches 24; Conservative 18; Mismatches 14; Indels 0; Gaps 0;

QY 12 CCDDYVRYRLPLRVKEYFYFTSDSPRGVWLLTFRDKEICADPRVPWVKMILNKL 67
Db 36 CCYGFQHPPPVQILKEWYPTSPACPKPGVILLTKRGRQICADPSKNWVRLMORL 91

RESULT 11
US-09-141-833-5
; Sequence 5, Application US/09141833
; Patent No. 6168784
; GENERAL INFORMATION:
; APPLICANT: OFFORD, ROBIN E
; APPLICANT: THOMPSON, DARREN
; APPLICANT: WILKEN, JILL
; TITLE OF INVENTION: N-TERMINAL MODIFICATIONS OF RANTES AND METHODS OF USE
; FILE REFERENCE: GRFN-026/030S
; CURRENT APPLICATION NUMBER: US/09/141,833
; CURRENT FILING DATE: 1998-08-28
; EARLIER APPLICATION NUMBER: 60/056,292
; EARLIER FILING DATE: 1997-09-03
; EARLIER APPLICATION NUMBER: 60/077,874
; EARLIER FILING DATE: 1998-03-13
; EARLIER APPLICATION NUMBER: 60/090,834
; EARLIER FILING DATE: 1998-06-26
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 68
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-141-833-5

Query Match 40.6%; Score 154; DB 4; Length 68;
Best Local Similarity 40.3%; Pred. No. 2.4e-13;
Matches 27; Conservative 14; Mismatches 24; Indels 2; Gaps 1;

QY 1 GPYGANMEDSVCCRDYRVRLPLRVKEYFYFTSDSPRGVWLLTFRDKEICADPRVPWV 60
Db 1 GPYSS--DTTPCCFAVIARPLPRAHKEYFYFTSGKCSNPAAVVFVTRKRNQVCANPEKKWV 58

QY 61 KMILNKL 67
Db 59 REYINSL 65

RESULT 12
US-08-208-339A-4
; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:

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APPLICANT: LI, ET AL.
TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESS: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/208,339A
FILING DATE: 8 MARCH 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-77
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 89 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
US-08-208-339A-4

Query Match 40.4%; Score 153; DB 1; Length 89;

Best Local Similarity 42.2%; Pred. No. 4.5e-13;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRGVVLLTFRDKEICADPRVPWVKMI 63
DB 24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGQICADPNKKVKY 81
QY 64 LNKL 67
DB 82 ISDL 85

RESULT 13

US-08-722-719-6
Sequence 6, Application US/08722719
Patent No. 6001606
GENERAL INFORMATION:
APPLICANT: ROSEN, CRAIG A.
APPLICANT: RUBIN, STEVEN M.
APPLICANT: LI, HAODONG
APPLICANT: ADAMS, MARK D.
TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
TITLE OF INVENTION: FACTOR-1 (MIP-1), MONOCYTE COLONY INHIBITORY FACTOR
TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/446,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/468,775
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0330007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 89 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-722-719-6

Query Match 40.4%; Score 153; DB 3; Length 89;

Best Local Similarity 42.2%; Pred. No. 4.5e-13;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRGVVLLTFRDKEICADPRVPWVKMI 63
DB 24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGQICADPNKKVKY 81
QY 64 LNKL 67
DB 82 ISDL 85

RESULT 14

US-08-936-387-17
Sequence 17, Application US/08936387
Patent No. 5965697
GENERAL INFORMATION:
APPLICANT: Czaplewski, Llyod G.
APPLICANT: Hunter, Michael G.
APPLICANT: Edwards, Richard M.
APPLICANT: Daswon, Keith M.
TITLE OF INVENTION: USE OF CHEMOKINES
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: HALE AND DORR LLP
STREET: 60 State Street
CITY: Boston
STATE: MA
COUNTRY: United States of America
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible

Search completed: July 28, 2003, 04:05:37
Job time : 5.79832 secs

Query Match	40.1%	Score 152;	DB 2;	Length 68;
Best Local Similarity	40.3%	Pred. No. 4.4e-13;		

RESULT 15

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Best Local Similarity 42.2%; Pred. No. 6-2e-13;

4 GANMEDSVCCRDYVRRLPLRVVKEYFYFTSDSCPRGCVLLTFRDKETCADPRVPWVKMI 63
QY ||| :|| | :|| : : : | | ||| :||| | :||| | :

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.42227 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

Sequence: 1 GPGANNEDSVCCRDYVRYR.....EICADPRVPVKMILNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 451899-seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications_AA:*

- 1: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep3:*
- 13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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- 17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	362	95.5	93	10	US-09-837-446-6
2	362	95.5	93	11	US-09-811-088-2
3	362	95.5	93	15	US-10-314-410-2
4	357	94.2	93	10	US-09-908-599-2
5	357	94.2	93	10	US-09-908-600-2
6	264	69.7	68	15	US-10-001-221A-3
7	210.5	55.5	67	15	US-10-001-221A-7
8	189	49.9	37	10	US-09-864-761-43730
9	157	41.4	78	15	US-10-001-221A-6
10	156	41.2	71	10	US-09-144-838-3
11	153	40.4	69	11	US-09-792-793A-28
12	153	40.4	89	10	US-09-334-923A-6
13	153	40.4	89	10	US-09-334-954A-6
14	153	40.4	97	10	US-09-925-302-792
15	151	39.8	70	10	US-09-334-923A-65
16	151	39.8	70	10	US-09-334-954A-65

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17 149 39.3 78 15 US-10-158-366-6 Sequence 6, Appli
18 148 39.1 67 10 US-09-144-838-41 Sequence 41, Appl
19 148 39.1 68 10 US-09-144-838-10 Sequence 10, Appl
20 148 39.1 68 10 US-09-144-838-42 Sequence 42, Appl
21 148 39.1 68 10 US-09-195-457-11 Sequence 11, Appl
22 148 39.1 68 11 US-09-792-793A-29 Sequence 29, Appl
23 148 39.1 91 8 US-08-927-939-21 Sequence 21, Appl
24 148 39.1 91 10 US-09-144-838-9 Sequence 9, Appli
25 148 39.1 91 10 US-09-834-795A-29 Sequence 29, Appli
26 148 39.1 91 12 US-09-834-794A-29 Sequence 29, Appli
27 148 39.1 91 12 US-09-920-137A-8 Sequence 8, Appli
28 148 39.1 91 12 US-09-537-858-1 Sequence 1, Appli
29 148 39.1 91 15 US-10-158-366-5 Sequence 5, Appli
30 148 39.1 91 15 US-10-057-275-8 Sequence 8, Appli
31 148 39.1 91 15 US-10-293-705-12 Sequence 12, Appli
32 146 38.5 89 10 US-09-834-795A-34 Sequence 34, Appli
33 146 38.5 89 12 US-09-834-794A-34 Sequence 34, Appli
34 144 38.0 60 11 US-09-888-938-5 Sequence 5, Appli
35 144 38.0 66 10 US-09-144-838-37 Sequence 37, Appli
36 144 38.0 66 12 US-09-537-858-2 Sequence 2, Appli
37 144 38.0 67 10 US-09-144-838-38 Sequence 38, Appli
38 143 37.7 73 10 US-09-144-838-6 Sequence 6, Appli
39 140 36.9 66 15 US-10-141-620-19 Sequence 19, Appli
40 140 36.9 69 10 US-09-195-457-9 Sequence 9, Appli
41 140 36.9 70 11 US-09-792-793A-24 Sequence 24, Appli
42 140 36.9 91 15 US-10-153-064-3 Sequence 3, Appli
43 140 36.9 92 8 US-08-927-939-19 Sequence 19, Appli
44 140 36.9 92 10 US-09-151-450-3 Sequence 3, Appli
45 140 36.9 92 10 US-09-908-599-3 Sequence 3, Appli

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ALIGNMENTS

RESULT 1

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US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; PRIOR FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

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Query Match 95.5%; Score 362; DB 10; Length 93;
Best Local Similarity 94.2%; Pred. No. 4e+38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db 25 GPGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
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Qy 61 KMIILNLSQ 69

Db 85 KMIILNLSQ 93

RESULT 2

US-09-811-088-2

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; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          95.5%; Score 362; DB 15; Length 93;
Best Local Similarity 94.2%; Pred. No. 4e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYRVYRLPLRVVKEYEYTTSDSCPRPGVWLLTFRDKKEICADPRVPW 60
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DB 25 GPGANNEDSVCCRDYRVYRLPLRVVKKHFYTTSDSCPRPGVWLLTFRDKKEICADPRVPW 84
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QY 61 KMILNKLSQ 69
    |||||||
DB 85 KMILNKLSQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PF177P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match          94.2%; Score 357; DB 10; Length 93;
Best Local Similarity 92.8%; Pred. No. 1.7e-37;
Matches 64; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

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DB 25 GPGANNEDSVCCRDYRVYRLPLRVVKKHFYTTSDSCPRPGVWLLTFRDKKEICADPRVPW 84
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QY 61 KMILNKLSQ 69
    |||||||
DB 85 KMILNKLSQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE.

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[illegible]

PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
SEQ ID NO 43730
LENGTH: 37
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC004382.1
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: EST HUMAN HIT: W61220.1, EVALUATE 8.50e-01
OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUATE 3.00e-18
US-09-864-761-43730

Query Match 49.9%; Score 189; DB 10; Length 37;
Best Local Similarity 89.2%; Pred. No. 8.4e-17;
Matches 33; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 5 ANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGV 41
DB 1 ANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGV 37

RESULT 9
US-10-001-221A-6
Sequence 6, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
PREMACK, BRETT HOWARD, MAUREEN
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 78
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 41.4%; Score 157; DB 15; Length 78;
Best Local Similarity 40.8%; Pred. No. 2e-12;
Matches 29; Conservative 17; Mismatches 23; Indels 2; Gaps 2;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVL-LTFDRDKEICADPRVP 58

DB 1 GPYGANVEDSICCFNWINRKIPQIRLESYTRITNIQCPKEAVIFKKTORQKEVCADPKR 60
QY 59 WVKMILNLSQ 69
DB 61 WVRDSMKHLQ 71

RESULT 10

US-09-144-838-3
Sequence 3, Application US/09144838A
Patent No. US20020051996A1
GENERAL INFORMATION:
APPLICANT: Siani, Michael A.
APPLICANT: Wilken, Jill
APPLICANT: Simon, Reyna
APPLICANT: Kent, Stephen B.H.
TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
FILE REFERENCE: GRFN-020/01US
CURRENT APPLICATION NUMBER: US/09/144,838A
CURRENT FILING DATE: 1998-08-31
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER FILING DATE: 1997-09-04
NUMBER OF SEQ ID NOS: 54
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 71
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 41.2%; Score 156; DB 10; Length 71;
Best Local Similarity 42.9%; Pred. No. 2.4e-12;
Matches 24; Conservative 18; Mismatches 14; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLTLFRDKEICADPRVPVVKMILNKL 67
DB 12 CCYGFQHQPPPVQILKWTPTSPACPKPGVILLTKRGQICADPSKNWVRQLMQL 67

RESULT 11

US-09-792-793A-28
Sequence 28, Application US/09792793A
Patent No. US20020168370A1
GENERAL INFORMATION:
APPLICANT: McDonald, John R.
APPLICANT: Coggin, Philip
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
FILE REFERENCE: 25020-601D
CURRENT APPLICATION NUMBER: US/09/792,793A
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 93
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 28
LENGTH: 69
TYPE: PRT
ORGANISM: homo sapien
FEATURE:
OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 40.4%; Score 153; DB 11; Length 69;
Best Local Similarity 42.2%; Pred. No. 5.5e-12;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLTLFRDKEICADPRVPVVKM1 63
DB 4 GTNKE--LCCLVYTSNQIPQKEIVDYSETSPQCPKPGVILLTKRGQICADPNKKVQKY 61
QY 64 LNKL 67

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; ORGANISM: Homo sapiens
US-09-334-954A-6

Query Match 40.4%; Score 153; DB 10; Length 89;
Best Local Similarity 42.2%; Pred. No. 7.3e-12;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps

QY 4 GANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVVLVTRDKKEICADPRVPVVKMI 63
      | | | | | : : : | : : | | | | | | | | | | | | | | | | | | | | |
Db 24 GTNKE--LCCLVYTSWQIQKFIVDYSETSPQCPKPGVILLTKRGRQICADPNKKWQKY 81
      | | | | | : : : | : : | | | | | | | | | | | | | | | | | | | | |

QY 64 LNKL 67
      : : |
Db 82 ISDL 85

RESULT 14
US-09-925-302-792
; Sequence 792, Application US/09925302
; Patent No. US20020044941A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA104
; CURRENT APPLICATION NUMBER: US/09/925,302
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05918
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 792
; LENGTH: 97
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-302-792

Query Match 40.4%; Score 153; DB 10; Length 97;
Best Local Similarity 42.2%; Pred. No. 8e-12;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps

QY 4 GANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVVLVTRDKKEICADPRVPVVKMI 63
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Db 32 GTNKE--LCCLVYTSWQIQKFIVDYSETSPQCPKPGVILLTKRGRQICADPNKKWQKY 89
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QY 64 LNKL 67
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Db 90 ISDL 93

RESULT 15
US-09-334-923A-65
; Sequence 65, Application US/09334923A
; Patent No. US20020061551A1
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides
; FILE REFERENCE: 1488.033000D
; CURRENT APPLICATION NUMBER: US/09/334,923A
; CURRENT FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 08/208,339
; PRIOR FILING DATE: 1994-03-08
; PRIOR APPLICATION NUMBER: US 08/446,881
; PRIOR FILING DATE: 1995-05-05
; PRIOR APPLICATION NUMBER: US 08/465,682
; PRIOR FILING DATE: 1995-06-06
; PRIOR APPLICATION NUMBER: US 08/468,775
; PRIOR FILING DATE: 1995-06-06
; PRIOR APPLICATION NUMBER: US 08/722,719
; PRIOR FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65

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; SOFTWARE: PatentIn Ver. 2.0

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; SEQ ID NO 65

; LENGTH: 70

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-334-923A-65

Query Match 39.8%; Score 151; DB 10; Length 70;

Best Local Similarity 42.2%; Pred. NO. 1e-11;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

Matches	27;	Conservative	14;	Mismatches	21;	Indels	2;	Gaps	1;
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QY 4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKEICADPRVPWKMI 63

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Db 5 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCCKPGVMLLTKRGRQICADPNKKWQKY 62

[illegible]

Search completed: July 28, 2003, 04:20:05
Job time : 9.42227 secs

Job time : 9.42227 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 79.1471 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-32
Perfect score: 379
Sequence: 1 GPYCANMEDSVCCRDYVYR.....EICADPRVPWVKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Main:*
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5: /cgn2_6/ptodata/1/paa/US081_COMB.pep.*
6: /cgn2_6/ptodata/1/paa/US082_COMB.pep.*
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27: /cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	379	100.0	69	13 US-08-939-107-32	Sequence 32, Appl
2	379	100.0	69	14 US-09-067-447-32	Sequence 32, Appl
3	379	100.0	69	14 US-09-067-447-32	Sequence 32, Appl
4	379	100.0	69	14 US-09-067-447B-32	Sequence 32, Appl
5	379	100.0	69	19 US-09-509-165A-32	Sequence 32, Appl
6	362	95.5	69	27 US-60-412-866-1	Sequence 1, Appli

7	362	95.5	70	13	US-08-939-107-30	Sequence 30, Appl
8	362	95.5	70	14	US-09-067-447-30	Sequence 30, Appl
9	362	95.5	70	14	US-09-067-447-30	Sequence 30, Appl
10	362	95.5	70	14	US-09-067-447B-30	Sequence 30, Appl
11	362	95.5	70	19	US-09-509-165A-30	Sequence 30, Appl
12	362	95.5	86	13	US-08-925-857-10	Sequence 10, Appl
13	362	95.5	93	1	PCT-US00-00953-6	Sequence 6, Appli
14	362	95.5	93	8	US-08-464-594-2	Sequence 2, Appli
15	362	95.5	93	8	US-08-479-620-2	Sequence 2, Appli
16	362	95.5	93	9	US-08-558-658-2	Sequence 2, Appli
17	362	95.5	93	11	US-08-760-127-3	Sequence 3, Appli
18	362	95.5	93	12	US-08-820-364-2	Sequence 2, Appli
19	362	95.5	93	13	US-08-925-857-12	Sequence 12, Appl
20	362	95.5	93	13	US-08-931-764-2	Sequence 2, Appli
21	362	95.5	93	13	US-08-931-764B-2	Sequence 2, Appli
22	362	95.5	93	13	US-08-939-107-2	Sequence 2, Appli
23	362	95.5	93	14	US-09-067-447-2	Sequence 2, Appli
24	362	95.5	93	14	US-09-067-447-2	Sequence 2, Appli
25	362	95.5	93	14	US-09-067-447B-2	Sequence 2, Appli
26	362	95.5	93	19	US-09-509-165A-2	Sequence 2, Appli
27	362	95.5	93	19	US-09-591-992-2	Sequence 2, Appli
28	362	95.5	93	21	US-09-712-726-2	Sequence 2, Appli
29	362	95.5	93	21	US-09-791-537-22726	Sequence 22726, A
30	362	95.5	93	22	US-09-811-088-2	Sequence 2, Appli
31	362	95.5	93	22	US-09-837-446-6	Sequence 6, Appli
32	362	95.5	100	21	US-09-760-476-2007	Sequence 2007, Ap
33	362	95.5	100	21	US-09-760-481-204	Sequence 204, App
34	362	95.5	100	26	US-10-216-245-2007	Sequence 2007, Ap
35	362	95.5	100	26	US-10-216-388-204	Sequence 204, App
36	362	95.5	100	26	US-10-217-651-449	Sequence 449, App
37	362	95.5	154	13	US-08-939-107-40	Sequence 40, Appl
38	362	95.5	154	14	US-09-067-447-40	Sequence 40, Appl
39	362	95.5	154	14	US-09-067-447-40	Sequence 40, Appl
40	362	95.5	154	14	US-09-067-447B-40	Sequence 40, Appl
41	362	95.5	154	19	US-09-509-165A-40	Sequence 40, Appl
42	362	95.5	172	20	US-09-646-028-49	Sequence 49, Appl
43	362	95.5	334	20	US-09-646-028-53	Sequence 53, Appl
44	362	95.5	587	20	US-09-646-028-50	Sequence 50, Appl
45	357	94.2	93	1	PCT-US00-30237-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-08-939-107-32
; Sequence 32, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939,107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.
;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/33318
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 32:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-08-939-107-32

Query Match 100.0%; Score 379; DB 13; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
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DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
61 KMILNKLSQ 69

RESULT 2

US-09-067-447-32
;; Sequence 32, Application US/09067447
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
;; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
;; NUMBER OF SEQUENCES: 44
;; CORRESPONDENCE ADDRESS:
;; ADDRESS: Marshall, O'Toole, Gerstein, Murray & Borun
;; STREET: 6300 Sears Tower, 233 South Wacker Drive
;; CITY: Chicago
;; STATE: Illinois
;; COUNTRY: United States of America
;; ZIP: 60606-6402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/067,447
;; FILING DATE:
;; CLASSIFICATION:
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/939,107
;; FILING DATE: 26-SEPT-1997
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/660,542
;; FILING DATE: 7-JUN-1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/558,658
;; FILING DATE: 16-NOV-1995
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.

;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/34404
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 32:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-09-067-447-32

Query Match 100.0%; Score 379; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
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DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
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RESULT 3

US-09-067-447-32
;; Sequence 32, Application US/09067447A
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
;; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
;; TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
;; FILE REFERENCE: 27866/34404
;; CURRENT APPLICATION NUMBER: US/09/067,447A
;; CURRENT FILING DATE: 1998-04-28
;; EARLIER APPLICATION NUMBER: 08/939,107
;; EARLIER FILING DATE: 1997-09-26
;; EARLIER APPLICATION NUMBER: 08/660,542
;; EARLIER FILING DATE: 1996-06-07
;; EARLIER APPLICATION NUMBER: 08/558,658
;; EARLIER FILING DATE: 1995-11-16
;; EARLIER APPLICATION NUMBER: 08/479,620
;; EARLIER FILING DATE: 1995-06-07
;; NUMBER OF SEQ ID NOS: 44
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 32
;; LENGTH: 69
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-32

Query Match 100.0%; Score 379; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
|||||
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
61 KMILNKLSQ 69

RESULT 4

RESULT 7
US-08-939-107-30
; Sequence 30, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald

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Query Match      100.0%; Score 379;.. DB 14; Length 69;
Best Local Similarity 100.0%; Pred. NO. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GPYGANNESVCCRDYVRVRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPW 60
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Db       1 GPYGANNESVCCRDYVRVRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPW 60
          |||||

QY      61 KMILNKLQSO 69
          |||||
Db       61 KMILNKLQSO 69
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RESULT 5
US-09-509-165A-32
; Sequence 32, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.

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RESULT 9

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; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447B-30

Query Match          95.5%; Score 362; DB 14; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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    |||||
Db 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKFYWTSDSCPRGCVLLTFRDKKEICADRPVPW 61
    |||||

QY 61 KMILNKLSQ 69
    |||||
Db 62 KMILNKLSQ 70

RESULT 10
US-09-067-447B-30
; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Dealey, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match          95.5%; Score 362; DB 14; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKYFYTSDSCPRGCVLLTFRDKKEICADRPVPW 60
    |||||
Db 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKFYWTSDSCPRGCVLLTFRDKKEICADRPVPW 61
    |||||

QY 61 KMILNKLSQ 69
    |||||
Db 62 KMILNKLSQ 70

RESULT 11
US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match          95.5%; Score 362; DB 19; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKYFYTSDSCPRGCVLLTFRDKKEICADRPVPW 60
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Db 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKFYWTSDSCPRGCVLLTFRDKKEICADRPVPW 61
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QY 61 KMILNKLSQ 69
    |||||
Db 62 KMILNKLSQ 70

RESULT 12
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
```

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; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925.857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
;
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
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; US-08-925-857-10
;
; Query Match 95.5%; Score 362; DB 13; Length 86;
; Best Local Similarity 94.2%; Pred. No. 9.6e-39;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 60
Db 18 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 77
QY 61 KMILNKLSQ 69
Db 78 KMILNKLSQ 86
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; RESULT 13
; PCT-US00-00953-6
; Sequence 6, Application PCT/TUS00000953
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
; TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: PCT/US00/00953
; CURRENT FILING DATE: 2000-01-14
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; PCT-US00-00953-6
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; Query Match 95.5%; Score 362; DB 1; Length 93;
; Best Local Similarity 94.2%; Pred. No. 1.1e-38;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 84
;
; RESULT 14
; US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,
; ADDRESS: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
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; US-08-464-594-2
;
; Query Match 95.5%; Score 362; DB 8; Length 93;
; Best Local Similarity 94.2%; Pred. No. 1.1e-38;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 84
;
; RESULT 15
; US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
;
; QY 61 KMILNKLSQ 69
; Db 85 KMILNKLSQ 93
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; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
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; APPLICATION NUMBER: US/08/925.857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
;
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
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; US-08-925-857-10
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; Query Match 95.5%; Score 362; DB 13; Length 86;
; Best Local Similarity 94.2%; Pred. No. 9.6e-39;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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Db 18 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 77
QY 61 KMILNKLSQ 69
Db 78 KMILNKLSQ 86
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; RESULT 13
; PCT-US00-00953-6
; Sequence 6, Application PCT/TUS00000953
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
; TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: PCT/US00/00953
; CURRENT FILING DATE: 2000-01-14
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; PCT-US00-00953-6
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; Query Match 95.5%; Score 362; DB 1; Length 93;
; Best Local Similarity 94.2%; Pred. No. 1.1e-38;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 84
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; RESULT 14
; US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,
; ADDRESS: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
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; US-08-464-594-2
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; Query Match 95.5%; Score 362; DB 8; Length 93;
; Best Local Similarity 94.2%; Pred. No. 1.1e-38;
; Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVVLLTFRDKEICADPRVPWV 84
;
; RESULT 15
; US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
;
; QY 61 KMILNKLSQ 69
; Db 85 KMILNKLSQ 93
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; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-620-2

Query Match 95.5%; Score 362; DB 8; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.le-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
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Db 25 GPYGANMEDSVCCRDYRVVRLPLRVVKEYFYTSDCSPRCGVLLTFRDKKEICADPRVPWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

Search completed: July 28, 2003, 04:14:54
Job time : 79.1471 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 24.3529 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-32
Perfect score: 379
Sequence: 1 GPGANNMEDSVCCRDYVRYR.....EICADPRVPWVKMLNLSQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues
Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*
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2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
3: /cgn2_6/ptodata/2/paa/US05_NEW_COMB.pep.*
4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4.*
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14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	362	95.5	69	12 US-10-341-931-2	Sequence 2, Appli
2	362	95.5	93	2 PCT-US02-35606-109	Sequence 109, App
3	362	95.5	93	2 PCT-US02-35606-146	Sequence 146, App
4	362	95.5	93	2 PCT-US02-40891-473	Sequence 473, App
5	362	95.5	93	2 PCT-US02-40891-549	Sequence 549, App
6	362	95.5	93	2 PCT-US02-40891-638	Sequence 638, App
7	362	95.5	93	2 PCT-US02-40891-639	Sequence 639, App
8	362	95.5	93	2 PCT-US02-40891-640	Sequence 640, App
9	362	95.5	93	2 PCT-US02-40891-641	Sequence 641, App
10	362	95.5	93	12 US-10-314-410-2	Sequence 2, Appli
11	362	95.5	93	12 US-10-405-027-5105	Sequence 5105, Ap
12	362	95.5	93	12 US-10-445-790-2	Sequence 2, Appli
13	362	95.5	93	14 US-60-453-135-8659	Sequence 8659, Ap
14	362	95.5	93	14 US-60-453-050-8659	Sequence 8659, Ap
15	362	95.5	93	14 US-60-455-444-4765	Sequence 4765, Ap
16	362	95.5	93	14 US-60-465-241-4765	Sequence 4765, Ap
17	362	95.5	93	14 US-60-466-412-8659	Sequence 8659, Ap
18	362	95.5	172	12 US-10-335-394-49	Sequence 49, Appli
19	362	95.5	334	12 US-10-335-394-53	Sequence 53, Appli

20	362	95.5	587	12	US-10-335-394-50	Sequence 50, Appli
21	362	95.5	678	2	PCT-US02-40891-333	Sequence 333, App
22	357	94.2	93	12	US-10-285-572-2	Sequence 2, Appli
23	357	94.2	93	12	US-10-137-438A-2	Sequence 2, Appli
24	357	94.2	93	12	US-10-406-494-2	Sequence 2, Appli
25	356	93.9	677	2	PCT-US02-40891-422	Sequence 422, App
26	356	93.9	678	2	PCT-US02-40891-257	Sequence 257, App
27	349	92.1	676	2	PCT-US02-40891-424	Sequence 424, App
28	349	92.1	677	2	PCT-US02-40891-423	Sequence 423, App
29	342	90.2	676	2	PCT-US02-40891-425	Sequence 425, App
30	264	69.7	68	10	US-09-839-445-3	Sequence 3, Appli
31	264	69.7	68	12	US-10-001-221A-3	Sequence 3, Appli
32	210.5	55.5	67	10	US-09-839-445-7	Sequence 7, Appli
33	210.5	55.5	67	10	US-10-001-221A-7	Sequence 7, Appli
34	167.5	44.2	77	10	US-09-839-445-6	Sequence 6, Appli
35	157	41.4	78	12	US-10-001-221A-6	Sequence 6, Appli
36	153	40.4	69	11	US-10-375-209A-28	Sequence 28, Appli
37	153	40.4	89	2	PCT-US02-40891-546	Sequence 546, App
38	153	40.4	89	2	PCT-US02-40891-561	Sequence 561, App
39	153	40.4	89	2	PCT-US02-40891-562	Sequence 562, App
40	153	40.4	89	2	PCT-US02-40891-564	Sequence 564, App
41	153	40.4	89	2	PCT-US02-40891-565	Sequence 565, App
42	153	40.4	89	2	PCT-US02-40891-566	Sequence 566, App
43	153	40.4	89	2	PCT-US02-40891-567	Sequence 567, App
44	153	40.4	89	12	US-10-165-233A-6	Sequence 6, Appli
45	153	40.4	89	12	US-10-405-027-2964	Sequence 2964, Ap

ALIGNMENTS

RESULT 1
US-10-341-931-2
; GENERAL INFORMATION:
; Sequence 2, Application US/10341931
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
; TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
; FILE REFERENCE: 00784 SRP
; CURRENT APPLICATION NUMBER: US/10/341,931
; CURRENT FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: 08/931,764
; PRIOR FILING DATE: 1997-09-16
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-931-2

Query Match	95.5%	Score 362;	DB 12;	Length 69;
Best Local Similarity	94.2%	Pred. No. 1.3e+40;		
Matches	65;	Conservative	3;	Mismatches 1; Indels 0; Gaps 0;
Qy	1	GPGANNMEDSVCCRDYVRYRLPLRVVYKFEYFTSDSCPRPGVLLTFRDKKEICADPRVPWV	60	
Db	1	GPGANNMEDSVCCRDYVRYRLPLRVVYKFEYFTSDSCPRPGVLLTFRDKKEICADPRVPWV	60	
Qy	61	KMLNKLQ	69	
Db	61	KMLNKLQ	69	

RESULT 2
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.

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; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 99
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLNLKLSQ 69
Db 85 KWLNLKLSQ 93

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; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 146
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLNLKLSQ 69
Db 85 KWLNLKLSQ 93

RESULT 4
PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
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; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLNLKLSQ 69
Db 85 KWLNLKLSQ 93

RESULT 5
PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
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PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT

Query Match 95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65: Conservative 3; Mismatches 1; Indels

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RESULT 7
PCI-US02-40891-639
: Sequence 639, Application PC/TUS0240891
: GENERAL INFORMATION:
: APPLICANT: Human Genome Sciences, Inc.
: TITLE OF INVENTION: Albumin Fusion Proteins
: FILE REFERENCE: PF564PCT

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/ CURRENT APPLICATION NUMBER: PCT/US02/40891
/ CURRENT FILING DATE: 2002-12-23
/ PRIOR APPLICATION NUMBER: 60/341,811
/ PRIOR FILING DATE: 2001-12-21
/ PRIOR APPLICATION NUMBER: 60/360,000
/ PRIOR FILING DATE: 2002-02-28
/ PRIOR APPLICATION NUMBER: 60/378,950
/ PRIOR FILING DATE: 2002-05-10
/ PRIOR APPLICATION NUMBER: 60/398,008
/ PRIOR FILING DATE: 2002-07-24
/ PRIOR APPLICATION NUMBER: 60/411,355
/ PRIOR FILING DATE: 2002-09-18
/ PRIOR APPLICATION NUMBER: 60/414,984
/ PRIOR FILING DATE: 2002-10-02
/ PRIOR APPLICATION NUMBER: 60/417,611
/ PRIOR FILING DATE: 2002-10-11
/ PRIOR APPLICATION NUMBER: 60/420,246
/ PRIOR FILING DATE: 2002-10-23
/ PRIOR APPLICATION NUMBER: 60/423,623
/ PRIOR FILING DATE: 2002-11-05
/ PRIOR APPLICATION NUMBER: 60/351,360
/ PRIOR FILING DATE: 2002-01-28
/ Remaining Prior Application data removed -
/ NUMBER OF SEQ ID NOS: 2222
/ SOFTWARE: Patent In Ver. 2.0
/ SEQ ID NO 639
/ LENGTH: 93
/ TYPE: PRT
/ ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match          95.5%; Score 362;
Best Local Similarity 94.2%; Pred. No. 1
Matches 65; Conservative 3; Mismatch

QY 1 GPGANNMEDSVCCRDYVRVRLPLRVVYKEYFY
   |||||
Db 25 GPGANNMEDSVCCRDYVRVRLPLRVVYKEYFY
   |||||

QY 61 KMLNKLQSQ 69
   |||||
Db 85 KMLNKLQSQ 93

RESULT 8
PCT-US02-40891-640
/ Sequence 640, Application PC/TUS0240891
/ GENERAL INFORMATION:
/ APPLICANT: Human Genome Sciences, Inc.
/ TITLE OF INVENTION: Albumin Fusion Protein
/ FILE REFERENCE: PF564PCT
/ CURRENT APPLICATION NUMBER: PCT/US02/40891
/ CURRENT FILING DATE: 2002-12-23
/ PRIOR APPLICATION NUMBER: 60/341,811
/ PRIOR FILING DATE: 2001-12-21
/ PRIOR APPLICATION NUMBER: 60/360,000
/ PRIOR FILING DATE: 2002-02-28
/ PRIOR APPLICATION NUMBER: 60/378,950
/ PRIOR FILING DATE: 2002-05-10
/ PRIOR APPLICATION NUMBER: 60/398,008
/ PRIOR FILING DATE: 2002-07-24
/ PRIOR APPLICATION NUMBER: 60/411,355
/ PRIOR FILING DATE: 2002-09-18
/ PRIOR APPLICATION NUMBER: 60/414,984
/ PRIOR FILING DATE: 2002-10-02
/ PRIOR APPLICATION NUMBER: 60/417,611
/ PRIOR FILING DATE: 2002-10-11
/ PRIOR APPLICATION NUMBER: 60/420,246
/ PRIOR FILING DATE: 2002-10-23
/ PRIOR APPLICATION NUMBER: 60/423,623
/ PRIOR FILING DATE: 2002-11-05
/ PRIOR APPLICATION NUMBER: 60/351,360
/ PRIOR FILING DATE: 2002-01-28

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; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 2222

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 640

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

PCT-US02-40891-640

Query Match 95.5%; Score 362; DB 2; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.9e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 60

||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :|||||

Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 84

QY 61 KMILNKLQ 69

|||||

Db 85 KMILNKLQ 93

RESULT 9

PCT-US02-40891-641

; Sequence 641, Application PC/TUS0240891

; GENERAL INFORMATION:

; APPLICANT: Human Genome Sciences, Inc.

; TITLE OF INVENTION: Albumin Fusion Proteins

; FILE REFERENCE: PF564PCT

; CURRENT APPLICATION NUMBER: PCT/US02/40891

; CURRENT FILING DATE: 2002-12-23

; PRIOR FILING DATE: 2001-12-21

; PRIOR APPLICATION NUMBER: 60/341,811

; PRIOR FILING DATE: 2001-12-21

; PRIOR APPLICATION NUMBER: 60/360,000

; PRIOR FILING DATE: 2002-02-28

; PRIOR APPLICATION NUMBER: 60/378,950

; PRIOR FILING DATE: 2002-05-10

; PRIOR APPLICATION NUMBER: 60/398,008

; PRIOR FILING DATE: 2002-07-24

; PRIOR APPLICATION NUMBER: 60/411,355

; PRIOR FILING DATE: 2002-09-18

; PRIOR APPLICATION NUMBER: 60/414,984

; PRIOR FILING DATE: 2002-10-02

; PRIOR APPLICATION NUMBER: 60/417,611

; PRIOR FILING DATE: 2002-10-11

; PRIOR APPLICATION NUMBER: 60/420,246

; PRIOR FILING DATE: 2002-10-23

; PRIOR APPLICATION NUMBER: 60/423,623

; PRIOR FILING DATE: 2002-11-05

; PRIOR APPLICATION NUMBER: 60/351,360

; PRIOR FILING DATE: 2002-01-28

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 2222

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 641

; LENGTH: 93

; ORGANISM: Homo sapiens

PCT-US02-40891-641

Query Match

Best Local Similarity 95.5%; Score 362; DB 2; Length 93;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 60

||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :|||||

Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 84

QY 61 KMILNKLQ 69

|||||

Db 85 KMILNKLQ 93

RESULT 10

US-10-314-410-2

; Sequence 2, Application US/10314410

; GENERAL INFORMATION:

; APPLICANT: Holtzman, Douglas A.

; APPLICANT: Gearing, David P.

; APPLICANT: Pan, Yang

; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING

; PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER

; TITLE OF INVENTION: USES

; FILE REFERENCE: 07334-324001

; CURRENT APPLICATION NUMBER: US/10/314,410

; CURRENT FILING DATE: 2002-12-06

; PRIOR APPLICATION NUMBER: US/09/811,088

; PRIOR FILING DATE: 2001-03-16

; PRIOR APPLICATION NUMBER: US 09/712,726

; PRIOR FILING DATE: 2000-11-14

; PRIOR APPLICATION NUMBER: US 08/820,364

; PRIOR FILING DATE: 1997-03-12

; PRIOR APPLICATION NUMBER: US 09/757,421

; PRIOR FILING DATE: 2001-01-10

; PRIOR APPLICATION NUMBER: US 08/843,652

; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 08/843,651

; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 09/354,809

; PRIOR FILING DATE: 1999-07-16

; PRIOR APPLICATION NUMBER: US 08/938,365

; PRIOR FILING DATE: 1997-09-26

; NUMBER OF SEQ ID NOS: 24

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-314-410-2

Query Match

Best Local Similarity 95.5%; Score 362; DB 12; Length 93;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 60

||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :||||| :|||||

Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYVTSDCPRPGVLLTFRDKEICADPRVPWV 84

QY 61 KMILNKLQ 69

|||||

Db 85 KMILNKLQ 93

RESULT 11

US-10-405-027-5105

; Sequence 5105, Application US/10405027

; GENERAL INFORMATION:

; APPLICANT: Rosen et al.

; TITLE OF INVENTION: Human Secreted Proteins

; FILE REFERENCE: PS806P1

; CURRENT APPLICATION NUMBER: US/10/405,027

; CURRENT FILING DATE: 2003-04-07

; PRIOR APPLICATION NUMBER: 60/369,608

; PRIOR FILING DATE: 2002-04-04

; PRIOR APPLICATION NUMBER: 60/376,175

; PRIOR FILING DATE: 2002-04-30

; NUMBER OF SEQ ID NOS: 5810

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 5105

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-405-027-5105

Query Match

Best Local Similarity 95.5%; Score 362; DB 12; Length 93;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 84
|||||
Qy 61 KMLINKLSQ 69
|||||
Db 85 KMLINKLSQ 93

RESULT 12

US-10-445-790-2

; Sequence 2, Application US/10445790

; GENERAL INFORMATION:

; APPLICANT: DeVico, Anthony L.

; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination

; FILE REFERENCE: 4115-109 CIP DIV

; CURRENT APPLICATION NUMBER: US/10/445,790

; CURRENT FILING DATE: 2003-05-27

; PRIOR APPLICATION NUMBER: PCT/US98/26291

; PRIOR FILING DATE: 1998-12-11

; PRIOR APPLICATION NUMBER: US 09/591,992

; PRIOR FILING DATE: 2000-12-06

; PRIOR APPLICATION NUMBER: US 60/186,416

; PRIOR FILING DATE: 2000-03-02

; PRIOR APPLICATION NUMBER: US 60/069,281

; PRIOR FILING DATE: 1997-12-11

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Patent in version 3.1

; SEQ ID NO 2

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-445-790-2

Query Match

Best Local Similarity 95.5%; Score 362; DB 12; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.9e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 84
|||||
Qy 61 KMLINKLSQ 69
|||||
Db 85 KMLINKLSQ 93

RESULT 13

US-60-453-135-8659

; Sequence 8659, Application US/60453135

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele

; APPLICANT: IAKOUBOVA, Olga

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

; FILE REFERENCE: CL001456

; CURRENT APPLICATION NUMBER: US/60/453,135

; CURRENT FILING DATE: 2003-03-10

; NUMBER OF SEQ ID NOS: 82762

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 8659

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-453-135-8659

Query Match

Best Local Similarity 95.5%; Score 362; DB 14; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.9e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 84
|||||
Qy 61 KMLINKLSQ 69
|||||
Db 85 KMLINKLSQ 93

RESULT 14

US-60-453-050-8659

; Sequence 8659, Application US/60453050

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele

; APPLICANT: LUKE, May

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

; FILE REFERENCE: CL001457

; CURRENT APPLICATION NUMBER: US/60/453,050

; CURRENT FILING DATE: 2003-03-10

; NUMBER OF SEQ ID NOS: 82762

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 8659

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-453-050-8659

Query Match

Best Local Similarity 95.5%; Score 362; DB 14; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.9e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 84
|||||
Qy 61 KMLINKLSQ 69
|||||
Db 85 KMLINKLSQ 93

RESULT 15

US-60-455-444-4765

; Sequence 4765, Application US/60455444

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele

; APPLICANT: BEGOVICH, Ann

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

; FILE REFERENCE: CL001455

; CURRENT APPLICATION NUMBER: US/60/455,444

; CURRENT FILING DATE: 2003-03-18

; NUMBER OF SEQ ID NOS: 50986

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 4765

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-455-444-4765

Query Match

Best Local Similarity 95.5%; Score 362; DB 14; Length 93;

Best Local Similarity 94.2%; Pred. No. 1.9e-40;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKKEICADPRVPWV 84
|||||
Qy 61 KMLINKLSQ 69
|||||
Db 85 KMLINKLSQ 93

Search completed: July 28, 2003, 04:18:50
Job time : 24.3529 secs

Result No.	Score	Query		Length	DB	ID	Description
		Match	%				
1	152	40.1	92	2	I52322	macrophage inflamm	
2	148	39.1	91	1	A28815	monocyte chemoattr	
3	146	38.5	91	1	A48539	monocyte chemoattr	
4	142	37.5	92	2	A32393	macrophage inflamm	
5	140	36.9	92	2	A30574	macrophage inflamm	
6	133	35.1	93	2	B35673	LD78-beta protein	
7	127.5	33.6	92	1	A31767	macrophage inflamm	
8	126.5	33.4	92	2	C30552	macrophage inflamm	
9	122	32.2	99	2	JC5295	monocyte chemotact	
10	121	31.9	109	2	A54678	monocyte chemotact	
11	120	31.7	120	2	I48147	monocyte chemoattr	
12	115.5	30.5	92	2	I46730	immune activation	
13	114	30.1	99	2	JC2417	monocyte chemoattr	
14	112.5	29.7	148	1	S07723	immediate-early se	
15	106	28.0	99	2	A60299	monocyte chemoattr	
16	105.5	27.8	148	1	A30209	PDGF-Inducible JE	
17	104	27.4	97	2	JC4912	eotaxin precursor	
18	101	26.6	50	2	C60407	monocyte adherence	
19	101	26.6	96	2	I48099	eotaxin precursor	
20	100.5	26.5	99	1	A32966	monocyte chemoattr	
21	100.5	26.5	99	2	JC2336	monocyte chemoattr	
22	100	26.4	96	2	JC2478	eotaxin precursor	
23	99.5	26.3	116	2	I49555	gene C10 protein -	
24	95	25.1	114	1	ETHUL	lymphotactin precu	
25	93.5	24.7	99	2	JC2136	monocyte chemoattr	
26	91	24.0	96	2	A37236	I-309 protein prec	
27	88.5	23.4	120	2	JE0177	lymphocyte and mon	
28	86.5	22.8	92	2	S24236	TCA3 protein - mou	
29	84.5	22.3	125	2	I46857	monocyte chemoattr	

C;Keywords: chemotaxis

matches 20; conservative 12; mismatches 24; indels 2; gaps

A;Accession: AZ1596
A;Molecule type: protein

A;Reference number: A35673; MUID:9028/155; PMID:1694014
A;Accession: B35673

RESULTS

31767

macrophage inflammatory protein 1-beta precursor [validated] - human
 N:Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene protein 2 (Act-2); T-cell activation protein gamma
 C:Species: Homo sapiens (man)
 C:Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
 C:Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30552
 R:Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequignol, Immunol. 27, 1091-1102, 1990
 A:Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
 A:Reference number: JH0319; MUID:91061800; PMID:2247088
 A:Accession: JH0319
 A:Status: translation not shown
 A:Molecule type: DNA
 A:Residues: 1-92 <BAI>
 A:CROSS-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
 A:Experimental source: natural killer cell, strain CD3-CD24, F5, JILIE5
 R:Napolitano, M.; Modi, W.S.; Cevalero, S.J.; Gharra, J.R.; Seunaez, H.N.; Leonard, W.J. J. Biol. Chem. 266, 17531-17536, 1991
 A:Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsiveness
 A:Reference number: A40978; MUID:91373378; PMID:1894635
 A:Accession: A40978
 A:Molecule type: DNA
 A:Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
 A:CROSS-references: GB:M69201; NID:g178021
 A:Note: 15-Ala was also found
 R:Lipkes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J. Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
 A:Title: Identification, cloning, and characterization of an immune activation gene.
 A:Reference number: A31767; MUID:89071764; PMID:2462251
 A:Accession: A31767
 A:Molecule type: mRNA
 A:Residues: 1-92 <LIP>
 R:Chang, H.C.; Reinherz, E.L.
 Eur. J. Immunol. 19, 1045-1051, 1989
 A:Title: Isolation and characterization of a cDNA encoding a putative cytokine which is
 A:Reference number: A37411; MUID:89325421; PMID:2568930
 A:Accession: A37411
 A:Molecule type: mRNA
 A:Residues: 1-92 <CHA>
 A:CROSS-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
 R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U. J. Immunol. 142, 1582-1590, 1989
 A:Title: Mitogenic activation of human T cells induces two closely related genes which
 A:Reference number: A30574; MUID:89140347; PMID:2521882
 A:Accession: B30574
 A:Molecule type: mRNA
 A:Residues: 1-19, 'L', 21-92 <ZIP>
 A:CROSS-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
 R:Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S. J. Immunol. 143, 2907-2916, 1989
 A:Title: A novel polypeptide secreted by activated human T lymphocytes.
 A:Reference number: A45817; MUID:90038522; PMID:2809212
 A:Accession: B45817
 A:Molecule type: mRNA
 A:Residues: 7-55, 'I', 57-79, 'T', 81-92 <MIL>
 A:CROSS-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
 R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. 142, 679-687, 1989
 A:Title: A family of small inducible proteins secreted by leukocytes are members of a new
 A:Reference number: A30552; MUID:89093958; PMID:2521353
 A:Accession: D30552
 A:Molecule type: mRNA
 A:Residues: 1-39, 'REASS', 46-92 <BRO>
 A:CROSS-references: GB:M23502; NID:g533212; PIDN:AAA36656.1; PID:g533213
 R:Clare, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M. submitted to the Brookhaven Protein Data Bank, January 1994
 A:Reference number: A52206; PDB:1HUM
 A:Contents: annotation; conformation and disulfide bond assignments by (1)H-NMR, residue
 C:Comment: This protein is secreted by activated lymphocytes and monocytes. It is bound
 C:Genetics:
 A:Gene: GDB:LAG1

A:CROSS-references: GDB:127451; OMIM:153335
 A:Map position: 17q21-17q21
 A:Introns: 26/1; 64/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: chemotaxis; cytokine; inflammation
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F:34-58,35-74/Disulfide bonds: #status experimental
 Query Match 33.6%; Score 127.5; DB 1; Length 92;
 Best Local Similarity 40.0%; Pred. No. 2.4e-08;
 Matches 24; Conservative 10; Mismatches 25; Indels 1; Gaps 1;
 QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKEICADPRVPWVK 61
 DB 25 PMGSD-PPTACCFSTARKLPNFVVDYETSSLSQPAVVPQTRKSKQVCADPSWVQ 83
 RESULT 8
 C30552
 macrophage inflammatory protein 1-beta precursor - mouse
 N:Alternate names: H400; SIS gamma; T-cell activation protein gamma
 C:Species: Mus musculus (house mouse)
 C:Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
 C:Accession: C30552; JLO088; PS0304; S22042
 R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. 142, 679-687, 1989
 A:Title: A family of small inducible proteins secreted by leukocytes are members of a
 A:Reference number: A30552; MUID:89093958; PMID:2521353
 A:Accession: C30552
 A:Molecule type: mRNA
 A:Residues: 1-92 <BRO>
 A:CROSS-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245
 R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D. J. Exp. Med. 168, 2251-2259, 1988
 A:Title: Resolution of the two components of macrophage inflammatory protein 1, and
 A:Reference number: JLO088; MUID:89067830; PMID:3058856
 A:Accession: JLO088
 A:Molecule type: mRNA
 A:Residues: 1-92 <SHE>
 A:CROSS-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
 A:Accession: PS0304
 A:Molecule type: protein
 A:Residues: 24-33, 'XX', 36, 'X', 38 <SH2>
 R:Daubersies, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M. submitted to the EMBL Data Library, October 1991
 A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.
 A:Reference number: S22042
 A:Accession: S22042
 A:Molecule type: DNA
 A:Residues: 1-92 <DAU>
 A:CROSS-references: EMBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127
 C:Comment: This protein is a monokine.
 C:Genetics:
 A:Introns: 26/1; 64/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: glycoprotein
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F:76/Binding site: carbohydrate (Asn) #status predicted
 Query Match 33.4%; Score 126.5; DB 2; Length 92;
 Best Local Similarity 39.4%; Pred. No. 3.1e-08;
 Matches 26; Conservative 11; Mismatches 28; Indels 1; Gaps 1;
 QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKEICADPRVPWVK 61
 DB 25 PMGSDPPTS-CFSTYRQLHRSFVMDYETSSLSKPAVVPFLTRGRQICANSEPPWVT 83
 QY 62 MLNKL 67
 ::

Db 84 EYMSDL 89

RESULT 9

monocyte chemotactic protein-2 precursor - human
C:Species: Homo sapiens (man)
C:Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C:Accession: J05295
R:Van Collie, E.; Froyen, G.; Nomiya, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van De
Biochem. Biophys. Res. Commun. 231, 726-730, 1997
A:Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of
A:Reference number: J05295; MUID:97224420; PMID:9070881
A:Accession: J05295
A:Molecule type: mRNA
A:Residues: 1-99 <VAN>
A:Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938
A:Experimental source: Bone marrow
C:Comment: This protein belongs to the beta-chemokine family which is one of the major H
tis and in tumor biology, and contribute to the trafficking and recruitment of the respon
C:Genetics:
A:Gene: mcp-2
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>

Query Match 32.2%; Score 122; DB 2; Length 99;
Best Local Similarity 33.8%; Pred. No. 1.2e-07;
Matches 25; Conservative 15; Mismatches 28; Indels 6; Gaps 2;

Qy 2 PYGNMEDSV-----CCRDYVRLPLRVVKEYF-YTSDSCPRPGVLLTFRDKEICADP 55

Db 19 PQGLAQPDVSIPITCCFVNINRKIPQRLSYRTIINQCPKEAVIFKTRQGEVADP 78

Qy 56 RVPVWKMILNKLQ 69

Db 79 KERWVDSMKHLQ 92

RESULT 10

monocyte chemotactic protein 3 precursor - human
N:Alternate names: monocyte chemoattractant protein MCP-3
C:Species: Homo sapiens (man)
C:Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999
C:Accession: A54678; J01478; S32222
R:Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.
Genomics 21, 403-408, 1994
A:Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the
A:Reference number: A54678; MUID:94375065; PMID:7916328
A:Accession: A54678
A:Molecule type: DNA
A:Residues: 1-109 <OPD>
A:Cross-references: GB:X72309
R:Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Biochem. Biophys. Res. Commun. 191, 535-542, 1993
A:Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and
A:Reference number: J01478; MUID:93213290; PMID:8461011
A:Accession: J01478
A:Molecule type: mRNA
A:Residues: 1-109 <OP2>
A:Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAA51055.1; PID:g313708
R:Minty, A.; Chalou, P.; Guillemot, J.C.; Kaghad, M.; Liauzon, P.; Magazin, M.; Miloux,
submitted to the EMBL Data Library, March 1993
A:Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattract
A:Reference number: S32222
A:Accession: S32222
A:Molecule type: mRNA
A:Residues: 1-109 <MIN>
A:Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397
C:Comment: This protein induces proteinase secretion and chemotaxis by macrophages and m
C:Genetics:
A:Gene: SCYA7; SCYA6; MCP-3

A:Cross-references: GDB:I38473; OMIM:158106

A:Map position: 17q11-17q12

A:Introns: 36/1; 75/2

C:Superfamily: macrophage inflammatory protein

C:Keywords: cytokine; glycoprotein; inflammation

F:1-33/Domain: signal sequence #status predicted <SIG>

F:34-109/Product: monocyte chemotactic protein 3 #status predicted <MAT>

F:39/Binding site: carbohydrate (Asn) #status predicted

Query Match 31.9%; Score 121; DB 2; Length 109;

Best Local Similarity 36.2%; Pred. No. 1.7e-07;

Matches 25; Conservative 13; Mismatches 29; Indels 2; Gaps 2;

Qy 2 PYGNMEDSVCCRDYVRLPLRVVKEYFVYTSDS-CPRPGVLLTFRDKEICADPRVPWV 60

Db 35 PVGIN-TSTTCCYFINKKIPQRLSYRTTSHCPRQVAVIFTKLDKEICADPTQKWV 93

Qy 61 KMILNKLQ 69

Db 94 QDFMKHLQ 102

RESULT 11

I48147

monocyte chemoattractant protein-1 - guinea pig

C:Species: Cavia porcellus (guinea pig)

C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999

C:Accession: I48147

R:Yoshimura, T.

J. Immunol. 150, 5025-5032, 1993

A:Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression

A:Reference number: I48147; MUID:93267104; PMID:8496603

A:Accession: I48147

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-120 <RES>

A:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821

C:Genetics:

A:Gene: MCP-1

C:Superfamily: macrophage inflammatory protein

Query Match 31.7%; Score 120; DB 2; Length 120;

Best Local Similarity 39.1%; Pred. No. 2.5e-07;

Matches 27; Conservative 12; Mismatches 26; Indels 4; Gaps 3;

Qy 2 PYGNMEDSVCCRDYVRLPLRVVKEY-FYTSDSCPRPGVLLTFRDKEICADPRVPWV 60

Db 25 PDGVN--TPTCCYTFNK-QIPLKRVGYRTTSRCQPEAVIFRTLKNKEVCADPTQKWV 81

Qy 61 KMILNKLQ 69

Db 82 QDYIAKLQ 90

RESULT 12

I46730

immune activation gene 2 - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 16-Jul-1999

C:Accession: I46730

R:Mori, S.; Goto, K.

Int. Immunol. 6, 149-156, 1994

A:Title: Dynamic changes in mRNA expression of neutrophils during the course of acute

A:Reference number: I46730; MUID:94198229; PMID:8148323

A:Accession: I46730

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-92 <MOR>

A:Cross-references: GB:dl7402; NID:g599577; PIDN:BAA04226.1; PID:g599578

C:Superfamily: macrophage inflammatory protein

Query Match 30.5%; Score 115.5; DB 2; Length 92;

Best Local Similarity 33.3%; Pred. No. 6.8e-07;

	Matches	22;	Conservative	15;	Mismatches	28;	Indels	1;	Gaps	1;
QY	2	PYGANNEDSVCCCRDYYVRYRLPLRVWVEKYFTSSCPRGVVLLTFRDKETCADERPVWVK	61							
Db	25	PMGSD-PPTACCFSYTLKRLPRFEVDYFETSLCSQPAPVVFVTKKGRCYCANPSESVMQ	83							
QY	62	MILNKL	67							
Db	84	EYVDDL	89							

RESULT 13

monocyte chemoattractant protein-2 precursor - pig
JC2417
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C:Accession: JC2417
R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 205, 148-153, 1994
A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis
A:Reference number: JC2417; MUID:95091716; PMID:7999015
A:Accession: JC2417
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
A:Cross-references: GB:248480; NID:G683718; PIDN:CAA88371.1; PID:G683719
A:Experimental source: corpus luteum
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match	30.1%	Score 114:	DB 2:	Length 99:
Best Local Similarity	35.8%	Pred. No. 1.le-06;		
Matches	24:	Conservative 12;	Mismatches 25;	Indels 6; Gaps 2;

RESULT 14

S07723
 Immediate-early serum-responsive protein JE precursor - rat
 N:Alternate names: monocyte chemoattractant protein-1
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
 C:Accession: S07723; JN0128
 R:Flimmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
 Nucleic Acids Res. 18, 23-34, 1990
 A:Title: Analysis of the rat JE gene promoter identifies an AP-1 binding site essential
 A:Reference number: S07723; MUID:90174947; PMID:2106664
 A:Accession: S07723
 A:Molecule type: DNA
 A:Residues: 1-148 <TIN>
 A:Cross-references: EMBL:X17053; NID:g55530; PIDN:CAA34901.1; PID:g55531
 R:Yoshimura, T.; Takeya, M.; Takahashi, K.
 Biochem. Biophys. Res. Commun. 174, 504-509, 1991
 A:Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its exp
 A:Reference number: JN0128; MUID:91128376; PMID:1704226
 A:Accession: JN0128
 A:Molecule type: mRNA
 A:Residues: 1-148 <YOS>
 A:Cross-references: GB:M57441; NID:g205333; PIDN:AAAG3496.1; PID:g205334
 A:Experimental source: spleen cells
 A:Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue 6
 C:Genetics:
 A:Introns: 26/1; 65/2
 C:Superfamily: macrophage inflammatory protein
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-148/Product: Immediate-early serum-responsive protein JE #status predicted <MAT>

	Query Match	29.7%	Score 112.5;	DB 1;	Length 148;	
	Best Local Similarity	27.3%;	Pred No.2; se-06;			
	Matches 22;	Conservative 10;	Mismatches 26;	Indels 1;	Gaps 1;	
QY	12	CCRDVYRPLRVAVKEY - FYTSDCSPRCGVLLTFTRDKCEICADPVPVKMTLNLSQ	69			
Dd	34	CCYSFTGKMIPMSLENRYKRTSSRPCKEAVFVTNLRKCEICADPNKENWQVKYRIKDQ	92			

RESULT 15

A60299
monocyte chemoattractant protein 1 precursor - human
N:Alternate names: GDCF-1; glioma-derived monocyte chemoattractant factor 1; MCAF; MCP-1;
N:Contains: glioma-derived chemoattractant factor 2 (GDCF-2)
C:Species: Homo sapiens (man)
C:Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999
C:Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488
R:Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.;
Biochem. Biophys. Res. Commun. 169, 346-351, 1990
A:Title: Structure of human monocyte chemoattractant protein gene and its regulation by T
A:Reference number: A35474; MUID:90290466; PMID:2357211
A:Accession: A35474
A:Molecule type: DNA
A:Residues: 1-99 <SHY>
A:Cross-references: GB:M37719; NID:gl87447; PIDN:AAA18102.1; PID:9487124
R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A:Reference number: A33476; MUID:90097880; PMID:2513477
A:Accession: A33476
A:Molecule type: mRNA
A:Residues: 1-99 <ROL>
A:Cross-references: GB:M30816; GB:M31625; NID:gl88701; PIDN:AAA36330.1; I
R:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
A:Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning

A:Reference number: S03339; MUID:89153605; PMID:2465924
A:Accession: S03339
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <YOS>
A:Cross-references: GB:X14768; NID:934513; PIDN:CAA32876.1; PID:g34514
A:Experimental source: glioma cell line U-105MG
R:Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A:Title: Human monocyte chemoattractant protein-1 (MCP-1).
A:Reference number: I51841; MUID:92095166; PMID:1661560
A:Accession: I51841
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-99 <Y02>
A:Cross-references: GB:S71513; NID:9240867; PIDN:AAB20651.1; PID:g240868
R:Bottozzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotact-1/MCAF).
A:Reference number: A60299; MUID:90216082; PMID:2182547
A:Accession: A60299
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <BOT>
R:Rifutani, Y.; Nomura, H.; Nataka, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C.
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and acti-
A:Reference number: A32300; MUID:89165862; PMID:2923622
A:Accession: A32300
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <FUR>
A:Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163
R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz

Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
 A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative member of the chemokine family
 A:Reference number: A32396; MUID:89184525; PMID:2648385
 A:Accession: A32396
 A:Molecule type: protein
 A:Residues: 'X', 25-99 <ROB>
 R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
 Biochem. Biophys. Res. Commun. 167, 904-909, 1990
 A:Title: Identification of the monocyte chemoattractant protein from human osteosarcoma cells
 A:Reference number: A34561; MUID:90211336; PMID:2322286
 A:Accession: A34561
 A:Molecule type: protein
 A:Residues: 29-33, 'XX', 36-52; 82-92 <DEC>
 R:Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
 Mol. Cell. Biochem. 126, 61-68, 1993
 A:Title: The expression of monocyte chemoattractant protein (MCP-1) in human vascular endothelial cells
 A:Reference number: 157488; MUID:94150478; PMID:8107690
 A:Accession: 157488
 A>Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-99
 A:Cross-references: GB:S69738; NID:G545464; PIDN:AAB29926.1; PID:G545465
 R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
 Chinese J. Microbiol. Immunol. 14, 29-32, 1994
 A:Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1) gene
 A:Reference number: JC1096
 A:Accession: JC1096
 A:Molecule type: mRNA
 A:Residues: 24-28, 'Q', 30-99 <YEO>
 C:Genetics:
 A:Gene: GDB:SCYA2
 A:Cross-references: GDB:125279; OMIM:158105
 A:Map position: 17q11.2-17q12
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
 F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MAT>
 F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimental
 F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 28.0%; Score 106; DB 2; Length 99;
 Best Local Similarity 29.7%; Pred. NO. 1e-05;
 Matches 22; Conservative 16; Mismatches 30; Indels 6; Gaps 2;
 Qy 2 PYGANMEDSV-----CCRDYVYRPLPLRVVKEY-FYTSDCSPRGVVLTPRDKKEICADP 55
 Db 19 PQGLAQPDAINAPVTCCYNFTNRKISVORLASRYRTSSCKPEAVIFKTIIVAKEICADP 78
 Qy 56 RVPWVKMILNKLQ 69
 Db 79 KQKVVQDSMDHLK 92

Search completed: July 28, 2003, 04:15:51
 Job time : 6.81303 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.62395 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

Sequence: 1 GPYCANMEDSVCCRDYVRYR.....EICADPRVPWVKMLNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	362	95.5	93	1 SY22_HUMAN	O00626 homo sapien
2	264	69.7	92	1 SY22_MOUSE	O88430 mus musculus
3	153	40.4	89	1 SY18_HUMAN	P55774 h small ind
4	152	40.1	92	1 SY03_RAT	P50229 rattus norv
5	148	39.1	91	1 SY05_HUMAN	P13501 homo sapien
6	146	38.5	91	1 SY05_MOUSE	P30882 mus musculus
7	146	38.5	92	1 SY05_RAT	P50231 rattus norv
8	142	37.5	92	1 SY03_MOUSE	P10855 mus musculus
9	141.5	37.3	90	1 SY04_CHICK	Q30826 gallus gall
10	140	36.9	91	1 SY05_CAVPO	P97272 cavia porce
11	140	36.9	92	1 SY03_HUMAN	P10147 homo sapien
12	135.5	35.8	104	1 SY12_MOUSE	Q82401 mus musculus
13	135	35.6	91	1 SY05_BOVIN	Q97919 bos taurus
14	134	35.4	113	1 SY15_HUMAN	Q16663 homo sapien
15	133	35.1	93	1 SY3L_HUMAN	P16619 homo sapien
16	132.5	35.0	92	1 SY04_RAT	P50230 rattus norv
17	130	34.3	93	1 SY14_HUMAN	Q16627 homo sapien
18	127.5	33.6	92	1 SY04_HUMAN	P13236 h small ind
19	126.5	33.4	92	1 SY04_MOUSE	P14097 mus musculus
20	124	32.7	94	1 VM12_KSHV	Q98157 kaposi's sa
21	122	32.2	99	1 SY08_HUMAN	P80075 homo sapien
22	121.5	32.1	70	1 REG1_BOVIN	P82943 bos taurus
23	121	31.9	99	1 SY07_HUMAN	P80098 homo sapien
24	120	31.7	120	1 SY02_CAVPO	Q88782 cavia porce
25	116.5	30.7	98	1 SY13_HUMAN	Q99616 homo sapien
26	115.5	30.5	92	1 SY04_RABIT	P46632 oryctolagus
27	114	30.1	99	1 SY08_PIG	P49873 sus scrofa
28	112.5	29.7	148	1 SY02_RAT	P14844 rattus norv
29	112	29.6	94	1 SY17_HUMAN	Q92583 homo sapien
30	112	29.6	94	1 SY26_HUMAN	Q97258 homo sapien
31	111.5	29.4	108	1 SY19_MOUSE	O70460 mus musculus
32	110.5	29.2	98	1 SY19_HUMAN	Q99731 homo sapien
33	109.5	28.9	119	1 SY24_MOUSE	Q9Jkc0 mus musculus

RESULT 1

SY22_HUMAN	STANDARD;	PRT;	93 AA.
ID	AC	O00626;	
DT	15-JUL-1999 (Rel. 38, Created)		
DT	15-JUL-1999 (Rel. 38, Last sequence update)		
DT	15-JUN-2002 (Rel. 41, Last annotation update)		
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).		
DE	STCP-1).		
GN	SCYA22 OR MDC OR A-152E5.1.		
OS	Homo sapiens (Human).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
OX	NCBI_TaxID=9606;		
RN	[1]		
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.		
RC	TISSUE=Macrophage;		
RX	MEDLINE=97296313; PubMed=9151897;		
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,		
RA	Levitin D., Mantovani A., Gray P.W.;		
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells.";		
RT	J. Exp. Med. 185:1595-1604(1997).		
RL	[2]		
RN	SEQUENCE FROM N.A.		
RP	TISSUE=Macrophage;		
RX	MEDLINE=97460118; PubMed=9312138;		
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D.,		
RA	Meng T., Boone T., Andrew D.P.;		
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes.";		
RT	J. Biol. Chem. 272:25229-25237(1997).		
RL	[3]		
RN	SEQUENCE FROM N.A.		
RP	MEDLINE=99425270; PubMed=10493829;		
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,		
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,		
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,		
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;		
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q.";		
RL	Genomics 60:295-308(1999).		
RN	[4]		
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RA	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,		
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RL	Genomics 60:295-308		

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RT Chemokine receptor 4.;
RL J. Biol. Chem. 273:1764-1768(1998).
CC -!- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24306.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; G98157; ICM9.
DR Genew; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
KW Cytokine; Chemotaxis; Signal.
FT CHAIN 1 24 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 25 93 BY SIMILARITY.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 95.5%; Score 362; DB 1; Length 93;
Best Local Similarity 94.2%; Pred. No. 3.2e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 84

QY 61 KMLNKLQ 69
Db 85 KMLNKLQ 93

RESULT 2
SY22_MOUSE
ID SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
DE SCYA22 OR ABCD1.
GN Mus musculus (Mouse).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OC NCBI_TaxID=10090;

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RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardali E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -!- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
KW Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAAE07CA CRC64;

Query Match 69.7%; Score 264; DB 1; Length 92;
Best Local Similarity 64.7%; Pred. No. 4.8e-26;
Matches 44; Conservative 16; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 60
Db 25 GPGANVEDSICCQDIYRHLPLSLVKEFFWTSKRSKRPVGVVLTIVKRDICADPRVWV 84

QY 61 KMLNKLK 68
Db 85 KLLHLKLS 92

RESULT 3
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;

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DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 DR SMART: SM00199; SCY; 1.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine: Chemotaxis; T-cell; Signal; Inflammatory response.
 KW Cytokine: Chemotaxis; T-cell; Signal; Inflammatory response.
 FT SIGNAL 1 23 POTENTIAL.
 FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
 FT DISULFID 33 57 BY SIMILARITY.
 FT DISULFID 34 73 BY SIMILARITY.
 FT CONFLICT 19 19 T -> A (IN REF. 2).
 FT CONFLICT 41 41 A -> E (IN REF. 1).
 SQ SEQUENCE 91 AA; 10071 MW; 5DFD66F4684FE1C8 CRC64;

Query Match 38.5%; Score 146; DB 1; Length 91;
 Best Local Similarity 42.4%; Pred. No. 2.2e-11;
 Matches 28; Conservative 12; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGANNEDSVCCRDYVRPLRVVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 61
 DB 25 PYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 82
 QY 62 MILNKL 67
 DB 83 EYINYL 88

RESULT 7
 SY05_RAT STANDARD; PRT; 92 AA.
 AC P50231;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
 DE SCYA5.
 GN Rattus norvegicus (Rat).
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Long Evans; TISSUE=Lung;
 RA Jones M.L., Shanley T.P., Ward P.A.;
 RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
 CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 CC EMBL; U06436; AAA96499.1; -.
 DR HSP; P13501; IRTN.
 DR InterPro: IPR000827; CC_chemokine_sml.
 DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 DR SMART: SM00199; SCY; 1.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine: Chemotaxis; T-cell; Signal; Inflammatory response.
 FT SIGNAL 1 24 POTENTIAL.
 FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A5.
 FT DISULFID 34 58 BY SIMILARITY.
 FT DISULFID 35 74 BY SIMILARITY.
 SQ SEQUENCE 92 AA; 10170 MW; B4FBE2B4208ABC6 CRC64;

Query Match 38.5%; Score 146; DB 1; Length 92;
 Best Local Similarity 42.4%; Pred. No. 2.3e-11;
 Matches 28; Conservative 12; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGANNEDSVCCRDYVRPLRVVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 61
 DB 26 PYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 83
 QY 62 MILNKL 67
 DB 84 EYINYL 89

RESULT 8
 SY03_MOUSE STANDARD; PRT; 92 AA.
 AC P10855; P14096;
 DT 01-JUL-1989 (Rel. 11, Created)
 DT 01-APR-1990 (Rel. 14, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (Ty-5) (SIS-alpha) (Heparin-binding chemotaxis protein) (L2G25B).
 DE SCYA3 OR MIP1A.
 GN Mus musculus (Mouse).
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=88258380; PubMed=3290382;
 RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
 RT "Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.";
 RT J. Exp. Med. 167:1939-1944(1988).
 RN [2]
 RP REVISIONS.
 RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
 RL J. Exp. Med. 170:2189-2189(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89093958; PubMed=2521353;
 RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
 RT "A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
 RT J. Immunol. 142:679-687(1989).
 RL [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=DBA/2J;
 RX MEDLINE=91016858; PubMed=2216738;
 RA Grove M., Lowe S., Graham G., Pragnell I., Plumb M.;
 RT "Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein 1 alpha gene.";
 RT Nucleic Acids Res. 18:5561-5561(1990).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89184547; PubMed=2784565;
 RA Kwon B.S., Weissman S.M.;
 RT "cDNA sequences of two inducible T-cell genes.";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91237116; PubMed=2033269;
 RA Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B., Cerami A.;
 RT "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human

1 delta) (Leukotactin-1) (LKN-1) (Mrp-2b).
GN SCYA15 OR MIP5 OR NCC3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
RC TISSUE=Liver;
RX MEDLINE=98263352; PubMed=9600961;
RA Pardioli A., Forssmann U., Zucht H.-D., Loetscher P.,
RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
RT "HCC-2, a human chemokine: gene structure, expression pattern, and
RT biological activity.";
RL *Proc. Natl. Acad. Sci. U.S.A.* 95:6308-6313(1998).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=98287677; PubMed=9624581;
RA Wang W., Bacon K.B., Oldham E.R., Schall T.J.;
RT "Molecular cloning and functional characterization of human MIP-1
RT delta, a new C-C chemokine related to mouse CCF-18 and C10.";
RL *J. Clin. Immunol.* 18:214-222(1998).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nishiyama H., Fukuda S., Ito M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine, MIP-1, HCC-2, LEC, and
RT RANTES.";
RL *J. Interferon Cytokine Res.* 19:227-234(1999).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=98208236; PubMed=9548457;
RA Yoon B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
RA Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.;
RT "Molecular cloning of leukotactin-1: a novel human beta-chemokine, a
RT chemoattractant for neutrophils, monocytes, and lymphocytes, and a
RT potent agonist at CC chemokine receptors 1 and 3.";
RL *J. Immunol.* 159:5201-5205(1997).
RN [5]
RP SEQUENCE FROM N.A.
RA Kwon B.S., Yoon B.-S.;
RT "Isolation and characterization of a human chemokine cDNA, hmpr-2b.";
RL Submitted (MAY 1996) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE OF 12-113 FROM N.A.
RA Coullin F., Power C.A., Alouani S., Peitsch M.C., Schroeder J.-M.,
RA Moshizuki M., Clark-Lewis I., Wells T.N.C.;
RL Submitted (JAN 1997) to the SWISS-PROT data bank.
RN [7]
RP DISCUSSION OF SEQUENCE.
RX MEDLINE=97275308; PubMed=9129202;
RA Wells T.N.C., Peitsch M.C.;
RT "The chemokine information source: identification and
RT characterization of novel chemokines using the WorldWideWeb and
RT expressed sequence tag databases.";
RL *J. Leukoc. Biol.* 61:545-550(1997).
RN [8]
RP TISSUE SPECIFICITY.
RX MEDLINE=98226667; PubMed=9558365;
RA Yoon B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
RA Fraser M. Jr., Kwon B.S.;
RT "Characterization of Ckbeta8 and Ckbeta8-1: two alternatively spliced
RT forms of human beta-chemokine, chemoattractants for neutrophils,
RT monocytes, and lymphocytes, and potent agonists at CC chemokine
RT receptor 1.";
RL *Blood* 91:3118-3126(1998).
RN [9]
RP FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES,
CC BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC
CC CHEMOKINE RECEPTOR CCR1. ALSO BINDS TO CCR3.
RN [10]
RP TISSUE SPECIFICITY: MOST ABUNDANT IN HEART. SKELETAL MUSCLE AND

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CC ADRENAL GLAND. LOWER LEVELS IN PLACENTA, LIVER, PANCREAS AND
CC BONE MARROW.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; 270293; CAA94308.1; -.
DR EMBL; 270292; CAA94306.1; -.
DR EMBL; AF031587; AAB94617.1; -.
DR EMBL; AF088219; AAC63328.1; -.
DR EMBL; U58914; AAD10847.1; -.
DR HSSP; P55773; 1691.
DR Genew; HGNC:10613; SCYA15.
DR MIM; 601393; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Heparin-binding; Signal; Polymorphism.
FT SIGNAL 1 21
FT CHAIN 22 113 SMALL INDUCIBLE CYTOKINE A15.
FT DISULFID 53 77
FT DISULFID 54 93
FT DISULFID 64 104
FT VARIANT 24 24
FT I -> T.
FT /FTid=VAR_011640.
FT CONFLICT 14 14 V -> I (IN REF. 5).
FT SEQUENCE 113 AA; 12248 MW; 0BA0FCE7B8A30A04 CRC64;
Query Match 35.4%; Score 134; DB 1; Length 113;
Best Local Similarity 39.3%; Pred. No. 8.7e-10;
Matches 22; Conservative 12; Mismatches 22; Indels 0; Gaps 0;
Oy 12 CCRDYVRYRLPLRVVKEYFTSDSCPRGVLLTFRDKEICADPRVPVWKMILNKL 67
D 53 CCTSYISQISQSLMKSYFTSSECSKPGVIFLTKRGVCAKPSGPGVQDCMKKL 108
RESULT 15
SY3L_HUMAN STANDARD; PRT; 93 AA.
AC P16619;
DT 01-AUG-1990 (Rel. 15, Created)
DT 01-AUG-1990 (Rel. 15, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 like 1 precursor (Tonsillar lymphocyte
DE LD78 beta protein) (G0/G1 switch regulatory protein 19-2) (GOS19-2
DE protein) (PAT 464.2).
DS SCYA3L1 OR GOS19-2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RX MEDLINE=90287702; PubMed=1972563;
RA Irving S.G., Zipfel P.F., Baile J., McBride O.W., Morton C.C.,
RA Burd P.R., Siebenlist U., Kelly K.;
RT "Two inflammatory mediator cytokine genes are closely linked and
RT variably amplified on chromosome 17q";
RL Nucleic Acids Res. 18:3261-3270(1990).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=91103879; PubMed=2271120;

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RA Blum S., Forsdyke R.E., Forsdyke D.R.;
RT "Three human homologs of a murine gene encoding an inhibitor of stem
RL cell proliferation.";
RL DNA Cell Biol. 9:589-602(1990).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=90287155; PubMed=1694014;
RA Nakao M., Nomiya H., Shimada K.;
RT "Structures of human genes coding for cytokine LD78 and their
RT expression.";
RL Mol. Cell. Biol. 10:3646-3658(1990).
RN [4]
RP SEQUENCE FROM N.A.
RC TISSUE=Pancreas, and Spleen;
RA Strausberg R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC). STRONG, TO SCYA3.
CC -----
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CC -----
DR EMBL; X52149; CAA36397.1; -.
DR EMBL; M24110; AAA35859.1; -.
DR EMBL; D90145; BAA14173.1; -.
DR EMBL; BC027888; AAB27888.1; -.
DR PIR; B30908; B30908.
DR PIR; B30412; B30412.
DR PIR; B35673; B35673.
DR PIR; S10157; S10157.
DR HSSP; P13236; LHUM.
DR Genew; HGNC:10628; SCYA3L1.
DR MIM; 601395; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 23
FT CHAIN 24 93 SMALL INDUCIBLE CYTOKINE A3 LIKE 1.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
FT SEQUENCE 93 AA; 10161 MW; A7A79E774006D61E CRC64;
Query Match 35.1%; Score 133; DB 1; Length 93;
Best Local Similarity 36.2%; Pred. No. 9.4e-10;
Matches 21; Conservative 13; Mismatches 24; Indels 0; Gaps 0;
Oy 10 SVCCRDVRYRLPLRVVKEYFTSDSCPRGVLLTFRDKEICADPRVPVWKMILNKL 67
D 32 TACCFSTYSRQIPQNFADYFETSSQSKSPSVIFLTRGRQVCAADPSEWQKYVSDL 89
Search completed: July 28, 2003, 04:01:12
Job time : 3.62395 secs

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Result No.	Score	Query		Length	DB	ID	Description
		Match					
1	264	69.7	92	11	Q9QZU2		Q9qzu2 mus musculus
2	260	68.6	81	11	Q9QZU1		Q9qzu1 rattus norv
3	260	68.6	92	11	Q91ZH5		Q91zh5 rattus norv
4	158	41.7	91	13	Q8QCS7		Q8qcs7 gallus gall
5	156	41.2	95	12	Q98158		Q98158 kaposi's sa
6	150	39.6	92	11	Q91Z65		Q91z65 sigmodon hi
7	146.5	38.7	92	11	Q91ZL0		Q91zl0 sigmodon hi
8	143	37.7	92	6	Q8SQ40		Q8sq40 felis silve
9	142.5	37.6	90	13	Q9PWA6		Q9pwa6 gallus gall
10	142	37.5	89	13	Q918E0		Q918e0 gallus gall
11	141.5	37.3	90	13	Q91OC9		Q91oc9 gallus gall
12	137.5	36.3	93	6	Q8SQA6		Q8sqa6 bos taurus
13	136.5	36.0	91	11	Q91ZL1		Q91zl1 sigmodon hi
14	133	35.1	93	4	Q96168		Q96168 homo sapien
15	128	33.8	80	4	Q14745		Q14745 homo sapien
16	116.5	30.7	79	4	Q95689		Q95689 homo sapien

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Db      85 KKLHLKLS 92
      1:|||||
      PRELIMINARY; PRT; 81 AA.
RESULT 2
Q90ZU1
AC Q90ZU1 PRELIMINARY; PRT; 81 AA.
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE Macrophage-derived chemokine (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes";
RL Blood 0:0-0(1999).
DR EMBL: AF163477; AAD55764.1; -.
DR HSSP: Q98157; ICM9.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
FT NON_TER 1
SQ SEQUENCE 81 AA; 9212 MW; A0A7ED1A0045D80B CRC64;

Query Match 68.6%; Score 260; DB 11; Length 81;
Best Local Similarity 63.2%; Pred. No. 1.6e-26;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDCPRGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 14 GPGANVEDSICQDIYRHPFVKEFYWTSKCRKPGVLLITIKNRDICAIDPRMLWV 73
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 74 KKLHLKLA 81
      1:|||||

Query Match 68.6%; Score 260; DB 11; Length 81;
Best Local Similarity 63.2%; Pred. No. 1.6e-26;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDCPRGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 14 GPGANVEDSICQDIYRHPFVKEFYWTSKCRKPGVLLITIKNRDICAIDPRMLWV 73
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 74 KKLHLKLA 81
      1:|||||

RESULT 3
Q91ZH5
ID Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMBLrel. 19, Created)
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBLrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF432871; AAL30397.1; -.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

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Query Match 68.6%; Score 260; DB 11; Length 92;
Best Local Similarity 63.2%; Pred. No. 1.8e-26;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFTSDCPRGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 25 GPGANVEDSICQDIYRHPFVKEFYWTSKCRKPGVLLITIKNRDICAIDPRMLWV 84
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 85 KKLHLKLA 92
      1:|||||

RESULT 4
Q8QG57
ID Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TREMBLrel. 21, Created)
DT 01-JUN-2002 (TREMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21655115; PubMed=11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
RT chicken CC chemokines";
RL Immunogenetics 53:674-683(2001).
DR EMBL: AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match 41.7%; Score 158; DB 13; Length 91;
Best Local Similarity 43.9%; Pred. No. 4.4e-13;
Matches 29; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDCPRGVLLTFRDKEICADPRVPW 61
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 25 PFGA--DTTVCFFNSYVRKLPQNHVNDYFTSSKCPQAAVFTTRKGVQCANPDARWVK 82
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 62 MILNKL 67
      1:|||||
Db 83 EYINFL 88
      1:|||||

RESULT 5
Q98158
ID Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; O12569;
DT 01-FEB-1997 (TREMBLrel. 02, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;

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